

**Development of a training programme for school health nurses on guiding adolescents in their decision-making about reproductive health in Ijebu Ode local government area of Nigeria**

**Student name: Oluwatoyin Abayomi Ogunyewo**

**Student number: 3315068**



**A thesis submitted in fulfilment of the requirements for the degree of Philosophiae Doctor in Nursing in the Faculty of Community and Health Sciences, University of the Western Cape, South Africa**

**Supervisor: Dr S Arunachallam**

**August 2016**

## **ABSTRACT**

This study focused on developing an intervention programme for school health nurses on guiding adolescents in their decision-making on reproductive health. A review of literature shows that this role is necessary, as there is a great need to reduce adolescents' morbidity and mortality rates due to poor decision-making about their reproductive health. School health nurses are strategically positioned to perform this role in ensuring that adolescents are well guided in making responsible decisions about their reproductive health. However, available evidence shows that school health nurses have not been performing this role in the school health service, especially in Nigeria. The provision of guidance for adolescents, on making decisions about their reproductive health is an adaptive role of school health nurses. The literature further shows that school health nurses require adequate preparation before they can perform this role. The study was conducted in the secondary school environment of Ijebu Ode local government area of Nigeria.

Work role performance theory, adult learning principles, and experiential learning constituted the theoretical point of departure for this study. The paradigmatic assumptions revolved around interpretivism/constructionism using the qualitative methodological approach. Semi-structured interviews and focus groups were the means of obtaining information from study participants for the study. The Intervention Design and Development model of Rothman and Thomas (2013) was used to design the study. The participants for the study were eight school health nurses, five school teachers, thirty-six adolescents, and one school health coordinator. They were all purposively selected. The data collected was analysed manually using inductive content analysis. The main findings from the interviews show that school health nurses have a poor awareness of their role and responsibilities, a lack of knowledge on how adolescents make their decisions, a lack of adequate knowledge on how to guide adolescents in their decision-making. The findings also show that there is poor interpersonal communication between school

health nurses, and adolescents, and between school health nurses and members of the teaching staff. The findings further show that there are insufficient continuous professional development programmes. Results from integrative reviews regarding the types of intervention programmes that had been developed for school health nurses at different times in the past focused on role orientation, knowledge and skills acquisition, and mutual interaction between school health nurses and adolescents, and members of the teaching staff. The findings reflect a gap in how school health nurses provide guidance to school adolescents in decision-making on their reproductive health, hence the need for a training programme that will assist them in discharging this function effectively.

A training programme was designed and developed for school health nurses to assist them on guiding adolescents in their decision making about their reproductive health. The training programme was pilot tested with observational methods, an interview being used as a means of assessing the quality and outcomes of the training programme. The results of the pilot test show the participants' satisfaction with the organisation and the quality of the training workshop. Participants indicated that they had gained more knowledge and understanding of adolescent reproductive issues, and their decision-making processes. They also said that they had gained more interpersonal skills, and greater communication skills. Some expressed the conviction that they had gained more confidence in their ability to communicate with the teaching staff. Some also expressed their readiness to apply the skills obtained during the training to their practice area. It is recommended that the training programme be fully evaluated in phase five of the Intervention Design and Development model of Rothman and Thomas, which will enable full dissemination and implementation of the programme (Rothman and Thomas, 2013). It is further recommended that the training programme be disseminated to end users (school health nurses) by sensitizing the necessary stake-holders on the need to use the training programme for school health nurses in their respective school contexts.

**Keywords: school health nurse, guidance, adolescent, decision-making, reproductive health, intervention**



## **DECLARATION**

I, Oluwatoyin Abayomi Ogunyewo, declare that the dissertation entitled: “The development of an intervention programme for school health nurses, on guiding adolescents in their decision-making about reproductive health in Ijebu Ode local government area of Nigeria” is my own work and has not been submitted for any other degree or examination at any University other than the University of the Western Cape. I have given full acknowledgement to the resources referenced in my study.

Oluwatoyin Abayomi Ogunyewo

Signed:



Date:

## ACKNOWLEDGEMENTS

I wish to give God Almighty all the honours, praises and glory through my Lord Jesus Christ for giving me the strength and grace to bring this PhD journey to a glorious end.

My sincere gratitude goes to the Management of the University of Jos, my former and present Vice Chancellors, Dean, Faculty of Medical Sciences, and the Deputy Registrar, Mr Nimchak for giving me this rare opportunity to pursue my PhD programme in South Africa. I will continue to appreciate you all for this.

I pay tribute, and declare profound appreciation to my supervisor, Dr S Arunachallam who made me feel so much at home, and thank him for his mentoring, contributions and unflinching support throughout the period of the programme. I also extend my sincere appreciation to Professor K Jooste, Professor J Chipps, and Professor O Adejumo for their inestimable contributions to my work.

I thank all my colleagues in the Department of Nursing Science at the University of Jos, especially, my head, Dr Sally Opaleye, for their support and words of encouragement.

I sincerely thank my uncle and guardian who is also my role model, Professor Bisi Ogunfowora for his encouragement right from my formative years till this moment, and for keeping track of my academic progress.

I am greatly indebted to my wonderful wife, Deaconess Bola Ogunyewo, for her unflinching support, and for keeping our home going during the course of my academic and career peregrinations. Without this, my dreams would not have become reality. I wish to extend my profound gratitude to my children, Bunmi and Funmi, who demonstrated great understanding regarding the absence from home of their father.

I owe a debt of gratitude to my beloved spouse Hajia Karimot Abayomi for her material and emotional support. By the same token, my appreciation goes to my 'mother' Hajia R Salami,

and to my wonderful ‘children’, Wunmi, Abiodun, Ayomide, Olamide and Bolu for their support. I appreciate equally the support of my sister, Omodunke and her family.

My sincere gratitude goes also to Pastor (Engr) and Mrs Yomi Adebisi, Dr and Mrs Adekunle Idowu, Haji Tosin Salisu, Mr Yomi Edalere, Mummy Fabanwo, Mrs Iyabo Akinleye and her family, for always being there for me.

I acknowledge with gratitude the efforts and contributions of Mr Muniru Adebayo and Mrs Anu Adesanya, my research assistants, and the various consultants who volunteered to participate in the design and development of the intervention programme. In the same vein, I appreciate the cooperation and support of Mrs Aminu, Mrs Tayo, Mrs Sobande and a host of others in the State Ministry of Health for their prompt response to my requests. I also extend my gratitude to the officials of the Ministry of Education: the teachers, students and school health nurses of the selected schools. I thank the entire staff of the School of Psychiatric Nursing, Abeokuta for their cooperation during the pilot testing of the intervention programme. Special appreciation also goes to the staff of Ijebu Ode library for their patience and for accommodating my needs.

I acknowledge with gratitude the numerous and significant contributions of my colleagues in this and other departments at the University of the Western Cape, namely Dr J.A Afemikhe, Dr J Afolayan, Mrs Cecilia Addei, Dr Akinyeye, Veronica, Dzigbodi, Doyin Olanlesi-Aliu, Mrs FO Ibitoye and Mrs A Ishola, and my brother in the Lord, Emmanuel.

I extend my appreciation to my Pastor, Dr O Fatoba, and his beloved wife, to Pastor and Mrs Tolu Balogun, Pastor (Dr) John Alegbe here in South Africa; and Pastor Niyi Adelabu, Pastor Dare Adewunmi, and Pastor Kayode back home in Nigeria, for their spiritual guidance.

## **DEDICATION**

I dedicate this, my PhD thesis to the sweet memories of:

My mother, Mrs Olu Ogunyewo, who stood by me when the going was tough, and made selfless sacrifice to ensure I escaped from the fringe of society.

My father, Mr Samuel Ogunyewo, who understood and appreciated what it means to be educated.

My uncle, Tunde Adenuga, whose love and care for me will remain indelible.

And my nephew, Ayodeji Ogunfowora, whom I loved so much.

Rest in the bosom of your Almighty till eternity





## TABLE OF CONTENTS

ABSTRACT.....	i
DECLARATION.....	iv
ACKNOWLEDGEMENTS .....	v
DEDICATION.....	vii
TABLE OF CONTENTS .....	viii
LIST OF TABLES .....	xiv
LIST OF FIGURES .....	xv
LIST OF BOXES IN THE TRAINING MODULES .....	xvi
LIST OF ABBREVIATIONS .....	xvii
CHAPTER ONE .....	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND TO THE STUDY.....	2
1.3 STATEMENT OF THE PROBLEM .....	5
1.4 RESEARCH QUESTIONS .....	7
1.5. AIM OF THE STUDY .....	7
1.6. OBJECTIVES OF THE STUDY.....	7
1.7 RESEARCH DESIGN AND METHODS.....	8
1.8 METATHEORETICAL AND THEORETICAL DEPARTURE/ASSUMPTIONS.....	10
1.8.1 Paradigm.....	10
1.8.1.1 Meta-theoretical assumptions .....	10
1.8.1.2 Meta-theoretical paradigm .....	11
1.8.2 Theoretical assumptions .....	12
1.8.2.1 <i>Work role performance theory</i> .....	12
1.8.2.2 <i>Adult learning principles</i> .....	17
1.8.2.3 <i>Experiential learning</i> .....	20
1.8.3 Theoretical concepts.....	22
1.9 JUSTIFICATION OF THE STUDY.....	24
1.10 LAYOUT OF THE THESIS .....	25
CHAPTER TWO: OVERVIEW OF LITERATURE .....	26
2.1 INTRODUCTION.....	26
2.2 The concept of adolescence.....	26
2.3 Adolescence: historical perspectives.....	27
2.4 Cross-cultural views of adolescence .....	28
2.5 The adolescent's growth and development.....	31
2.6 Adolescent and reproductive health.....	34

2.7 Religion's views on sexuality .....	41
2.8 Adolescent reproductive health policy in Nigeria .....	42
2.9 Adolescent reproductive health in Nigeria: State of the Art .....	43
2.11 School System in Nigeria .....	48
2.12 School health service and adolescent reproductive health .....	50
2.13 History of school health and school nursing .....	50
2.14 School nursing and the role of school nurses .....	51
2.15 School health service in Nigeria .....	53
2.16 School nursing and adolescent reproductive health .....	54
2.17 School health nurses and guidance .....	56
2.18 School health nurses' knowledge and academic preparation .....	61
2.2 SUMMARY .....	62
<b>CHAPTER THREE: RESEARCH METHODOLOGY.....</b>	<b>63</b>
3.1 INTRODUCTION.....	63
3.2 QUALITATIVE RESEARCH APPROACH .....	63
3.3 RESEARCH DESIGN .....	65
3.3.1 FACETS OF INTERVENTION RESEARCH .....	65
3.3.2 DESCRIPTION OF THOMAS AND ROTHMAN'S INTERVENTION DESIGN AND DEVELOPMENT MODEL .....	66
3.3.2.1 Phase one: Problem analysis and project planning .....	67
3.3.2.2 Phase two: Information gathering and synthesis .....	68
3.3.2.3 Phase three: Design.....	68
3.3.2.4 Phase four: Early development and pilot testing .....	68
3.3.2.5 Phase five: Evaluation and advanced development .....	69
3.3.2.6 Phase six: Dissemination .....	69
3.3.3 MODIFIED PHASES OF INTERVENTION DESIGN AND DEVELOPMENT OF ROTHMAN AND THOMAS.....	71
3.3.3.1 PHASE 1: PROBLEM ANALYSIS AND PROJECT PLANNING .....	71
3.3.3.2 PROCESS OF INFORMATION GATHERING AND SYNTHESIS .....	93
3.3.3.3 DESIGN PROCESS OF AN INTERVENTION PROGRAMME.....	98
3.3.3.4 PROCESS OF DEVELOPMENT AND PILOT TESTING OF AN INTERVENTION PROGRAMME.....	106
3.4 RIGOUR IN QUALITATIVE RESEARCH .....	108
3.4.1 Credibility .....	109
3.4.2 Transferability.....	112
3.4.3 Dependability.....	112
3.4.4 Confirmability .....	113

3.5 ETHICS STATEMENTS .....	113
3.6 SUMMARY .....	115
<b>CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS.....</b>	<b>116</b>
4.1 INTRODUCTION.....	116
4.2 PRESENTATION AND DISCUSSION OF THEMES AND SUB-THEMES.....	117
4.2.1 SECTION A.....	117
4.2.1.1 Findings relating to the first research question “What is the role of school health nurses in the secondary school environment of Ijebu Ode local government area?” .....	117
4.2.2 SECTION B.....	139
4.2.2.1 Findings relating to the second research question: “What understanding do school health nurses have of how school adolescents make their decisions on reproductive health?” .....	139
4.2.3 SECTION C.....	153
4.2.3.1 Findings relating to the third research question: “What are the experiences of school health nurses on guiding adolescents in their decision-making about reproductive health?” .....	153
4.2.4 SECTION D.....	158
4.2.4.1 Findings relating to fourth research question: “What are the challenges faced by school health nurses on guiding adolescents in their decision-making on reproductive health?” .....	158
4.6 SUMMARY OF KEY FINDINGS.....	175
<b>CHAPTER FIVE: INFORMATION GATHERING AND SYNTHESIS.....</b>	<b>178</b>
5.1 INTRODUCTION.....	178
5.2 IDENTIFYING FUNCTIONAL ELEMENTS OF SUCCESSFUL PROGRAMMES ....	178
5.2.1 Review question.....	179
5.2.2 Identifying and selecting existing types of information .....	180
5.2.3 Information sources .....	181
5.2.4 Eligibility criteria .....	181
5.2.5 Evaluation of data .....	183
5.2.6 Data extraction .....	186
5.2.7 Data Analysis.....	191
5.2.7.1 Findings relating to sub-review question, “what types of programmes have been developed for school health nurses?” .....	192
5.2.7.2 Findings relating to sub-review question 2 “What were the aims of those programmes?” .....	195
5.2.7.3 Finding relating to the question, “What are the key elements of successful intervention programmes?” .....	196
5.2.7.4 Finding relating to sub-review question: “What were the outcomes of the intervention programmes?” .....	199

5.3 SUMMARY .....	200
<b>CHAPTER SIX: DESIGN PHASE .....</b>	<b>202</b>
6.1 INTRODUCTION.....	202
6.1.1 Design domain .....	202
6.1.2 Design objectives .....	203
6.1.3 Design requirements .....	203
6.2 <i>Observational system</i> .....	204
6.2.1 Designing assessment .....	205
6.2.2 Description of modified 9-step process programme assessment model.....	206
6.2.3 Application of 9-step model to the assessment of a training programme .....	207
6.3. <i>Specifying procedural elements of the intervention programme</i> .....	213
6.3.1 Facilitation .....	214
6.3.2 Teaching/Instructional methods .....	216
6.3.3 Managing group dynamics during programme implementation .....	220
6.3.4 Content development .....	223
6.4 SUMMARY .....	225
<b>CHAPTER SEVEN: DEVELOPMENT OF AN INTERVENTION PROGRAMME .....</b>	<b>226</b>
7.1 INTRODUCTION.....	226
7.2 A TRAINING PROGRAMME TO ASSIST SCHOOL HEALTH NURSES ON GUIDING ADOLESCENTS IN DECISION-MAKING ABOUT REPRODUCTIVE HEALTH IN IJEBU ODE LOCAL GOVERNMENT .....	226
7.2.1 Evolution of training.....	227
7.2.2 Purpose of the training programme .....	228
7.2.3 Competencies to achieve the goal .....	228
7.3. LAYOUT OF THE TRAINING PROGRAMME.....	229
7.4 MODULE ONE: ROLES AND RESPONSIBILITIES OF SCHOOL HEALTH NURSES .....	237
7.4.1 Content of the module.....	239
7.4.2 Content of the module.....	242
7.5 MODULE TWO: CONCEPT OF ADOLESCENCE .....	243
7.5.1 Content of the module.....	245
7.5.2 Content of the module.....	249
7.6 MODULE THREE: REPRODUCTIVE HEALTH .....	251
7.6.1 Content of the module.....	253
7.6.2 Content of the module.....	266
7.7 MODULE FOUR: ADOLESCENT DECISION-MAKING .....	268
7.7.1 Content of the module.....	270

7.7.2 Content of the module.....	276
<b>7.8 MODULE FIVE: GUIDANCE .....</b>	<b>282</b>
7.8.1 Content of the module.....	284
7.8.2. Content of the module.....	293
<b>7.9 MODULE SIX: COMMUNICATION.....</b>	<b>307</b>
7.9.1 Content of the module.....	310
<i>Communication</i> .....	310
<b>7.10 SUMMARY .....</b>	<b>323</b>
<b>CHAPTER EIGHT: PILOT TESTING OF THE TRAINING PROGRAMME.....</b>	<b>325</b>
<b>8.1 INTRODUCTION.....</b>	<b>325</b>
<b>8.2 PILOT TESTING .....</b>	<b>325</b>
8.2.1 Recruitment of participants .....	326
8.2.2 Workshop setting .....	328
8.2.3 Equipment/Materials .....	328
8.2.4 Human resources.....	329
8.2.5 Organisation and activities during the workshop .....	329
8.2.6 Data analysis.....	334
8.2.6.1 Observations.....	334
8.2.6.2 Semi-structured interviews .....	338
<b>8.3 SUMMARY .....</b>	<b>342</b>
<b>CHAPTER NINE: SUMMARY, LIMITATION, RECOMMENDATION AND CONCLUSION .....</b>	<b>343</b>
<b>9.1 INTRODUCTION.....</b>	<b>343</b>
9.1.1 Aim of the study .....	343
9.1.2 Objectives of the study.....	343
<b>9.2 SUMMARY OF KEY FINDINGS.....</b>	<b>344</b>
9.2.1 Problem analysis and project planning.....	344
9.2.2 Information gathering and synthesis.....	345
9.2.3 Design .....	345
9.2.4 Development and pilot testing.....	346
<b>9.3 LIMITATIONS .....</b>	<b>346</b>
<b>9.4 RECOMMENDATIONS.....</b>	<b>347</b>
9.4.1 Governmental and non-governmental support .....	347
9.4.2 Nursing education .....	347
9.4.3 School nursing practice .....	347
9.4.4 Nursing organisations .....	347

9.4.5 Nursing research .....	348
9.5 CONCLUSION .....	348
REFERENCES.....	349
APPENDICES.....	371



## **LIST OF TABLES**

<b>3.1</b> Phases of intervention design and development model	69
<b>3.2</b> Study participants	75
<b>4.1</b> Themes and sub-themes for research question one	118
<b>4.2</b> Themes and sub-themes for research question two	140
<b>4.3</b> Themes and sub-themes for research question three	153
<b>4.4</b> Themes and sub-themes for research question four	159
<b>4.5</b> Summary of key findings	176
<b>5.1</b> Inter-rater agreement scores of research papers	185
<b>5.2</b> Summary of characteristics of included studies	187
<b>5.3</b> Themes, categories and sub-categories from integrative review	191
<b>6.1</b> Assessment questions and possible evidence	208
<b>7.1</b> Icons used in the training programme	229
<b>7.2</b> Summary of training modules	230
<b>8.1</b> Demographic characteristics of the pilot testing participants	327

## **LIST OF FIGURES**

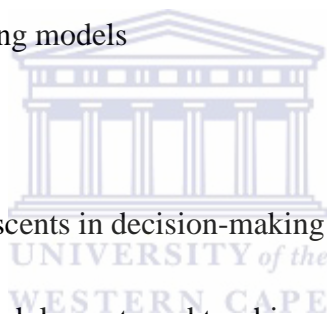
<b>3.1</b> Map of Ijebu Ode Local Government Area of Nigeria	74
<b>5.1</b> Flowchart – the screening process to select articles	183
<b>7.1</b> Female reproductive system	261
<b>7.2</b> Male reproductive system	262
<b>7.3</b> Johari window	200
<b>7.4</b> Development and functions in social processes	302





## LIST OF BOXES IN THE TRAINING MODULES

<b>Box 1:</b> National health policy	237
<b>Box 2:</b> Role and responsibilities of school health nurses	240
<b>Box 3:</b> Meaning and stages of adolescence	244
<b>Box 4:</b> Theories of adolescence	248
<b>Box 5:</b> Overview of reproductive health	252
<b>Box 6:</b> Adolescent reproductive health	264
<b>Box 7:</b> Overview of decision-making process	269
<b>Box 8:</b> Adolescent decision-making models	274
<b>Box 9:</b> Overview of guidance	283
<b>Box 10:</b> Process of guiding adolescents in decision-making on reproductive health	291
<b>Box 11:</b> Interaction process with adolescents and teaching staff	308



## **LIST OF ABBREVIATIONS**

BCPA	British Columbia Pharmacy Association
CDC	Centre for Disease Control
CREA	Creating Resources for Empowerment Action
CRR	Centre for Reproductive Rights
FMOE	Federal Ministry of Education
FMOH	Federal Ministry of Health
ICPD	International Conference on Population Development
MCGCP	Missouri Comprehensive Guidance and Counselling Program
NASN	National Association of School Nurses
NMDG	National Millennium Development Goals
NPHDA	National Policy on the Health and Development of Adolescents
NNPC	Nigeria National Petroleum Corporation
NPC	Nigeria Population Commission
PRB	Population Reference Bureau
SAHM	Society for Adolescent Health and Medicine
UNESCO	United Nations Scientific, Educational and Cultural Organization
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
WHO	World Health Organisation

## **CHAPTER ONE**

### **1.1 INTRODUCTION**

Reproductive health is “a state of physical, mental, and social wellbeing and not merely an absence of disease or infirmity in all matters relating to the reproduction and to its functions and processes” (Panda & Sehgal, 2009: 445). Adolescent reproductive health is an integral component of reproductive health, and focuses on issues such as unwanted pregnancy, harmful practices, unsafe abortions, Reproductive Tract Infections (RTI), Sexually Transmitted Infections (STIs), HIV/AIDS, gender-based violence, infertility, malnutrition, anemia, cancer and accessibility to information, education, and rehabilitation (Panda & Sehgal, 2009: 445). Adolescents face serious threats to their lives and health in the form of HIV/AIDS and other sexually transmitted infections, early pregnancy, and unsafe abortion (Center for Reproductive Rights, 2006: 99). High on the list of priorities, is achieving reproductive health for individuals in view of the unacceptable level of Sexually Transmitted Infections (STIs) including HIV/AIDS, unplanned pregnancies, and unsafe abortions. Unsafe sex is the second-most important risk factor for disability and death in the world’s poorest communities and the ninth-most important in developed countries (Glasier, Gulmezolu, Schmid, Moreno & Van Look, 2006: 1595). The world population of the present generation of people aged 10-24 years, including 10-19 years (adolescents) is the largest in history with a population of 1.8 billion, about a quarter of the world’s population. Of these, almost 90% live in low-income and middle-income countries where they constitute a far greater proportion of the population than in high-income countries because of the fertility rates (Sawyer, Afifi, Bearinger, Blakemore, Dick, Ezeh & Patton, 2012: 1630). Adolescent reproductive health was given priority focus, perhaps for the first time, during the ‘International Conference on Population Development’ which took place in Cairo, Egypt in 1994. The adolescent male and female reproductive health needs are expected to include the responses of societies toward the provision of information that should

help adolescents attain the level of maturity required to make responsible decisions, especially about their sexual conduct. The objective here is to protect them from sexually transmitted diseases, unwanted pregnancies, and the consequent risk of infertility (WHO, 1999). International law recognizes adolescents' "evolving capacities" to make decisions in matters affecting their lives (CPR, 2006: 99). Reproductive health is an essential area where adolescent decisions are highly critical.

## **1.2 BACKGROUND TO THE STUDY**

As adolescents transit from childhood to adulthood, they engage in risk-taking behaviours in their reproductive health that lead to preventable morbidity and mortality (Lim et al. 2012: 99). Some studies show that adolescents' risky sexual behaviours are commonplace globally. Pilgrim (2012: 5) indicates that more than seventy-five percent of adolescents in the English-speaking Caribbean region were reportedly having unprotected sex. The results of the 2011 National Youth Risk Behavior Survey show that almost one half (47.4%) of students are engaged in sexually risky behaviours that lead to unintended pregnancies or sexually transmitted diseases (Chilton et al. 2014: 581). In the United States, one in every four adolescent girls has a sexually transmitted infection (STI), and two-thirds of all individuals who acquire STIs are under 25 years of age (Luszczakoski & Rue, 2012: 230). In Nigeria, about one in every five sexually active females, and one in every twelve sexually active males have already engaged in sexual intercourse by the age of fifteen (Imaledo, Peter-Kio, Asuquo, 2013: 1). Risky sexual and reproductive behaviours are associated with young people, and these risky behaviours include: an early start to sexual activity, sex with many partners, low and inconsistent use of condoms, use of drugs and alcohol, anal sexual intercourse and oral sex [Imaledo et al. 2013:1; Okonkwo, Fatusi & Ilika 2005: 107]. A potential factor contributing to adolescent risk behaviour is the decision-making process that adolescents engage in when opportunities for risky behaviours arise (Wolff & Crockett, 2011: 1607). Unwise choices that

lead to risky behaviour in the reproductive health of adolescents, tend to make their decision-making appear complex. Adolescents who can think through their options and consider the consequences of potential courses of action should be less likely to opt for health-threatening behaviour (Wolff & Crockett, 2011: 1607). The National Policy on the Health and Development of Adolescents and Young People in Nigeria emphasizes that one of the key strategies for the implementation of the policy is the provision of access to a comprehensive range of adolescent-/youth-friendly information, counseling and health services, including school health services (Federal Ministry of Health, 2007: 13). A school has a profound influence on adolescent reproductive health, as it constitutes the second-most influential environment in the life of adolescents (Magalnick & Mazyck, 2008: 1052). School health services are put in place to address the health needs of students and staff alike. There is a growing trend to make reproductive health services more accessible to young people and provide services tailored to meet their needs. School-linked services are part of this movement, and school nurses are often at the forefront of such developments (Hayter, Owen & Cooke, 2012: 433). School nursing, which is an integral aspect of the school health service, is defined as the specialized practice of professional nurses that advances the well-being, academic success, and lifelong achievement of students, facilitating positive student responses to normal development, promoting health and safety, intervening with actual and potential health problems, providing case management services, and actively collaborating with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning (National Association of School Nurses, 2011: 1). Farrag and Hayter (2014: 49) identify sexual and reproductive health as one of the key areas of school nursing in the Western World. Birdthistle and Vince-Whitman (1997: 1) reveal that school may be the only place for adolescents to receive accurate reproductive health information, and that decision-making skills have been identified as one of the most desirous in addressing adolescent reproductive

health challenges. Advice on sexual health and contraception is one of the most important reasons students in New Zealand make use of school health services. School-based health care is viewed as one of the most effective strategies for delivering comprehensive primary and preventive health services to young people (Mason-Jones, Crisp, Momberg, Koech, Deoker & Mathews, 2012: 1). The National Association of School Nurses (2012:1), in its position statement, emphasizes that age-appropriate health education programmes about human sexuality should be included as part of a comprehensive school health education programme and be accessible to all students in schools. The Association further posits that school nurses could enhance the effectiveness of sexual health education by ensuring that “medically accurate, developmentally appropriate and evidence-based sexual health provides students with the skills and resources that help them make informed and responsible decisions”. The World Health Organisation (2008: 6) reiterates that one of the four essential components of FRESH (Focusing Resources on Effective School Health) is skills-based health intervention that focuses on the development of knowledge, attitudes, values and life skills needed to make, and act on, decisions to establish lifelong healthy practices and to reduce vulnerability to HIV. In a study carried out among school health nurses on guiding adolescents in their reproductive health decision-making in Queensland High Schools, Smith and Stepanov (2013: 1), report that the school nurses expressed their wish to receive more training and information toward enhancing their guidance of adolescents who seek advice on health issues, particularly in relation to decision-making capacity and sexual health matters. Gabzdyl (2010: 267) reveals that school nurses are expected to keep abreast of new developments and new strategies for providing services to adolescents. In Nigeria, the National School Health Policy recognizes the role of school health nurses in the provision of health to the members of the school community (Federal Ministry of Education, Nigeria, 2006a: 27). The implementation guidelines on school health services emphasize that the purpose of school health services is to help children at school

to achieve the maximum health possible for them to obtain full benefit from their education, and that the school health nurses are expected to play a vital role in achieving this goal (Federal Ministry of Education, Nigeria, 2006b: 18). The policy further recognizes the fact that the various services to be provided are highly technical and require the acquisition of appropriate knowledge and continuous skills development of school nurses. This position is further underscored by Ogunfowokan and Babatunde (2009: 5) who assert that school nurses worldwide should equip themselves in ways that enable them to provide current information for adolescents toward achieving their maximum potentials in their reproductive health. The National School Health Policy makes provision for school health nurses, and yet, the school nursing practice is poorly implemented, and this partially accounts for their non-registration by the Nursing and Midwifery Council of Nigeria (Ogunfowokan, 2010: 30).

### **1.3 STATEMENT OF THE PROBLEM**

Evidence shows that school health nurses occupy a pivotal role in providing expertise and oversight in the provision of school health services, which includes adolescent reproductive health (NASN, 2012: 1). Guiding adolescents on decision-making in their reproductive health requires that they are well aware of their role and know what to do in order for those expectations to be met (Gabzdyl, 2010: 267). There is no evidence that the school health nurses have been performing this role as expected of them. In a study carried out by Akpabio, Asuzu, Fajemilehin and Ofi (2009: 118) on the effectiveness of school health nursing in secondary schools, the findings reveal that school nurses were not appropriately positioned on how to provide effective health information, counseling, and identification of students' developmental status in order to effectively guide them. In other separate studies, the findings show that school nurses have not been able to live up to expectations regarding the guiding of adolescents' decision-making on their reproductive health due to poor role expectations, lack of training and inadequate facilities (Akpabio, 2010:21, Onyeka, Miettola, Ilika & Vaskilampi, 2011: 109).

Performance problems can be attributed to unclear expectations, skills deficit, resource or equipment shortage, or a lack of motivation (WHO, 2006: 4). The World Health Organization (2006: 4) further reiterates that poor performance of service providers leads to inaccessibility of services and inappropriate guidance and care. This view is congruent with the study of Rowe, deSavigny, Lanata & Victora (2005: 1026) which indicates that poor health worker practices contribute to low use of health facilities by vulnerable populations. There is no evidence of the preparedness of school nurses to take up the responsibility, as most of them were reported to commonly be drawn from the Ministry of Health, Community Health Centres, and hospital settings (Ogunfowokan, 2010: 30). There is ample evidence that for health workers to have a successful role transition, there should be acquisition of new knowledge and skills, perceived self-efficacy in the face of the situations they face, and satisfactory relations with the social networks (Durcharme, 2009: 44). It is not clear whether they know how to guide adolescents in their decision-making on reproductive health, or that what they do meets the clients' expectations. This explains the feeling of dissatisfaction with their involvement in school health activities arising from inadequate training, lack of motivation, and lack of facilities (Ogunfowokan, 2010: 30). In view of the school health nurses' strategic position in the school system, it is important and necessary that they play the role of guiding adolescents in their decision-making on reproductive health (NANS, 2012; FMOE, 2006a: 18). Against this backdrop, it is necessary to explore the gaps in school nurses' knowledge on the matter of guiding adolescents in their decision-making about reproductive health, which in turn has implications for the effectiveness with which they perform this function. In achieving high quality performance, it is equally necessary to explore how school nurses can be helped in performing this role.



#### **1.4 RESEARCH QUESTIONS**

- 1) What is the role of school health nurses in the secondary school environment of Ijebu Ode Local Government Area of Nigeria?
- 2) What understanding of how adolescents make their decisions on reproductive health do school health nurses have in Ijebu Ode Local Government Area of Nigeria?
- 3) What are the experiences of school health nurses on guiding adolescents in their decision-making on reproductive health in Ijebu Ode Local Government Area of Nigeria?
- 4) What are the challenges faced by school health nurses toward guiding adolescents in their decision-making on reproductive health in Ijebu Ode Local Government Area of Nigeria?
- 5) What kind of intervention programme would be appropriate for school health nurses toward guiding adolescents on decision-making regarding reproductive health in Ijebu Ode Local Government Area of Nigeria?
- 6) Can this intervention programme be tested using school health nurses?

#### **1.5. AIM OF THE STUDY**

The aim of this study is to develop an appropriate intervention programme that will assist school health nurses on guiding adolescents in making decisions about their reproductive health in the school environment of the Ijebu Ode Local Government Area. In order to achieve this purpose the following objectives were formulated:

#### **1.6. OBJECTIVES OF THE STUDY**

- 1) To explore the role of school health nurses in the school environment of Ijebu Ode Local Government Area of Nigeria.

- 2) To explore school health nurses' understanding of how adolescents make decisions in reproductive health within the school environment of the Ijebu-Ode Local Government Area.
- 3) To explore the experiences of school health nurses on guiding adolescents in their decision-making on reproductive health in the school environment of the Ijebu Ode Local Government Area of Nigeria.
- 4) To explore the challenges encountered by the school health nurses on guiding adolescents in their decision-making on reproductive health in the school environment of Ijebu Ode Local Government Area of Nigeria.
- 5) To develop an appropriate intervention programme for school health nurses on guiding adolescents in decision-making on reproductive health in the school health environment of the Ijebu Ode Local Government Area of Nigeria.
- 6) To implement the intervention programme through pilot testing for school health nurses.

## **1.7 RESEARCH DESIGN AND METHODS**

Research design encompasses the steps required in linking conceptual research problems with the empirical outcome as these include data collection and analysis toward ensuring validity of the findings (Burns & Grove, 2002: 195). The Intervention Design and Development model (Rothman & Thomas, 2013) was adapted for this study. The model has six phases which are: problem analysis and project planning; information gathering and synthesis; design; development; early development and advanced evaluation; and dissemination. The phases, for the purpose of this study, were limited to the first four. The implication of this is that the study terminated at the development of the intervention programme and pilot testing. This decision was taken because of the fact that the resources and time needed to cover the entire range of the intervention phases were insufficient. Comer, Mier, Galinsky (2004: 251) submit that it would not be necessary to follow all the phases to the logical conclusion, and that modification

of the phases may take place as the researcher deems fit. Their position aligns with Abell and Wolf (2003: 6) who had earlier indicated that a PhD study may not be able to accommodate all the phases of the intervention research considering the limited time and resources at the disposal of the relevant researcher. The fourth phase was modified to appear, in this study, as development and pilot testing. The Intervention Design and Development model of Rothman and Thomas (1994; 2013) has been successfully used to develop intervention models and programmes in several doctoral studies by the following researchers: Herbst (2002); Strydom (2002); van Heerden (2001); Steyn (2004); and Humpel (2004). They, in the course of utilising the model, modified the phases in order to suit the purposes of their studies (Strydom, Steyn & Strydom, 2007: 334). The activities in the first two phases entailed problem definition and assessment through exploratory and descriptive design. Qualitative research methods such as semi-structured interviews, and focus group discussions were used to elicit responses from the participants, who included school health nurses, secondary school adolescents, secondary school teachers, and a school health coordinator. The interviews ran from July through August, 2015. The data collected from these interviews was analysed in order to appropriately define the problem. The information gathering and synthesis phase entailed an integrative review of literature of various intervention programmes that had been developed for school health nurses in order to discover what others have done to understand and address the problems identified, and to further analyse and articulate the programme elements, usefulness, procedures, and challenges inherent in the use of those programmes. The outcome of this review, and the findings from interviews and focus group discussions constituted the baseline information needed for the design and development (Phases three and four respectively) of this intervention programme for school health nurses, on guiding adolescents about their decision-making on reproductive health. The outcome of the pilot testing of the intervention programme was assessed with observation and semi-structured interview methods.

## **1.8 METATHEORETICAL AND THEORETICAL DEPARTURE/ASSUMPTIONS**

Philosophical assumptions inform the choices that are of central importance in research (Creswell, 2009: 9). Put differently, they are the assumptions that guide the conducting of the research. Philosophical assumptions are derived from paradigms that direct the research activities.

### **1.8.1 Paradigm**

A paradigm is a collection of rules that delineate the research boundaries, and its process (Huitt, 2011: 1). A paradigm can be regarded as a form of thinking that shapes the direction and outcome of research. Put differently, it provides a philosophical direction for a research study. It consists of ontological, epistemological, methodological and axiological dimensions (Scotland, 2012: 9).

#### **1.8.1.1 Meta-theoretical assumptions**

There exist some mutual relationships among the paradigmatic assumptions. The epistemological paradigm for this study is interpretivism/constructivism which is an assumption based on the fact that truth and meaning do not exist in some external world. The people themselves construct meanings; they are not discovered. The constructivist standpoint holds that knowledge can only be obtained through different means such as ethnography, phenomenology, and grounded theory. The ontological assumption of constructivism is relativism, which emphasizes that reality is a function of subjectivities. Put differently, every individual constructs his or her reality on the basis of their personal opinions, nuances or prejudices, and therefore meaning and knowledge are constructed (Scotland, 2012: 9). The researcher had the conviction that the role played by school health nurses in the lives of adolescents in the school environment could only be fully appreciated if they were asked to talk explicitly about these role. Their role and activities, and also their challenges would then be much clearer to the researcher if others such as adolescents, who are the main beneficiaries

of their services, were interviewed to know whether school health nurses actually perform the role they claim they do or not. The school teachers happen to be the custodians of the school environment as well as the school health coordinator, to whom school health nurses are directly accountable. All of them, together, constituted the study participants. The methodological paradigm of interpretivism/constructivism is a qualitative approach as it enables an interactive researcher-participant relationship, with stakeholders in their natural setting, taking into account their values, emotions, culture, and their context (Ponterotto, 2002: 397). The choice of research approach is intricately linked to the epistemic content of the methodology. The means of data collection for the study were semi-structured interviews and focus group discussions while the data collected was analysed using inductive content analysis. The axiological position of the researcher is that, within the constructivist paradigm, the involvement of researcher values is inevitable, as the individual would be unravelling the meaning created by the people in relation to the phenomena being studied.

#### 1.8.1.2 Meta-theoretical paradigm

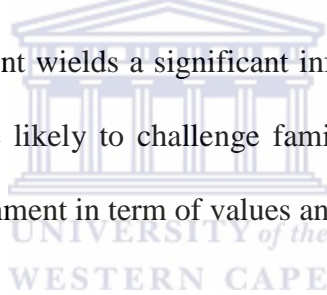
A *person* is defined as an open system in constant interaction with their environment (Plummer and Molzahn, 2009: 134) while Griffin and Lander (2014:19) view *person* as an individual considered to be the central phenomenon of interest to nurses. Adolescents are individuals who are found at the stage of life where nursing intervention in their decisions is very crucial as the outcome of their decisions will shape their lives in the course of their journey into adulthood.

*Nursing* is defined from a meta-paradigmatic perspective as an action taken on behalf of, or in conjunction with the person, and the goals or outcomes of nursing actions (Fawcett, 2000a: 5), while Barrett (2002: 51) defines *nursing* as the scientific art of using knowledge of unitary human beings who are in mutual process with their environments, for the well-being of people. Nurses use their comprehensive knowledge of human interactions with environment to provide guidance for adolescents toward making informed decisions on their reproductive health, and

for this to be optimally effective, nurses need to be familiar with adolescent decision-making experiences in reproductive health.

*Health* is defined as the dynamic life experiences of a human being, which implies continuous adjustment to stressors in the internal and external environment, through optimum use of one's resources to achieve maximum potential for daily living (Sieloff & Messmer, 2013: 288). Reproductive health issues constitute stressors to adolescents for which their ability (and the resources available) to make good decisions is required in order to adjust to the pressure resulting from those stressors in order to achieve the best reproductive state of health possible.

*Environment* is defined as all conditions surrounding and affecting development and behaviour, and it includes mutuality of person and earth's resources with a global and cosmic view (Roy, 2009: 12). The school environment wields a significant influence on adolescents as they are prone to peer influences that are likely to challenge family values, thereby creating a gap between home and school environment in term of values and norms.



## 1.8.2 Theoretical assumptions

This study departed from the following theoretical assumptions: work role performance theory, adult learning principles and experiential learning.

### 1.8.2.1 *Work role performance theory*

Researchers have studied work performance in organizations which culminated in the emergence of different frameworks on work performance (Griffin, Neal & Parker, 2007: 328). Task performance is a recurring concept in all the frameworks. It is defined as “the proficiency (i.e. competency) with which one performs central job tasks” (Campbell, 1990: 687). Griffin et al. (2007: 328) argue that these conceptual frameworks fail to accommodate the complexity and changes that occur in work organisation. The point of convergence of almost all of these frameworks is that role theory played a vital role in their conceptualizations. However, most

of the applications focused on the process of role development instead of the relationship of work context to dimensions of performance. The work role performance theory by Griffin et al. (2007) builds on the weaknesses of other contemporary work performance frameworks. The authors factored in the changes the contemporary organizations' experience. These changes are mainly interdependence and uncertainty of work systems. The construct of uncertainty in the work context is a reflection of lack of predictability in the inputs, processes, or output of work systems. Some of the factors that create uncertainty include new competition, changing technologies, and evolving customer demands. Formalizations of valued work behaviour are shaped by uncertainty in an organizational context. The authors further posit that when there is a low level of uncertainty, goal attainment could be affected, using external forms of control such as job descriptions that outline the task expectations, procedures, and the required standard. However, in the event of high uncertainty, the use of external control becomes meaningless as there is insufficient opportunity to anticipate contingencies and hence it becomes a bit more difficult to formalize task requirements. Following from this, the role an individual performs becomes more flexible, and they become a function of the response to changing conditions and customers' demands. The distinction between formalized and emergent role brought about three different sub-dimensions of work role performance which include: individual task proficiency, adaptivity, and proactivity. Proficiency describes the extent role requirements that can be formalized, are met by the individuals. Adaptivity is a function of how individuals can adjust or cope with the role requirements that are not formalized. Simply put, the emergent or new role that was not proceduralized. Proactivity requires that individuals use their discretion, and self-directed action to anticipate or initiate change. Both adaptivity and proactivity sub-dimensions are highly related to role or work where the relevant processes cannot be formalized (Griffens et al. 2007: 329). However, there is the caution that these forms of behaviour are not mutually exclusive, hence individuals still

perform the specified aspects of their role that are predictable in the face of high uncertainty, just as adaptive and proactive behaviours can emerge when the level of uncertainty is low. The second form of change is interdependence which results from the cooperation and collaboration among the components involved in the work context, in order to achieve shared goals. Thus an individual behaviour impacts on both the effectiveness of the individual in question on the one hand, and the effectiveness of others such as groups, teams and organization as a whole, on the other hand. The individual's work behaviour, as an employee, and its relation to effectiveness would not have a strong link when the activities of a work role are domiciled in an interdependent work situation, whereas the interdependence of the work role with other members of an organization brings about the effectiveness of the organization as a whole. Arising from the above are nine sub-dimensions of work role behaviour that can be used to explain the performance of school nurses in the school health services, and the school health programme.

**Individual task proficiency:** The task proficiency emphasizes that the tasks can be formalized. In view of Nigeria's school health policy directives (Federal Ministry of Education, 2006a: 12), the school nurses are expected to carry out a pre-entry school screening/examination, keep school health records, oversee the running of a sickbay, action the prevention and control of communicable and non-communicable diseases through inspections, exclusions, re-admissions, immunization, sanitation, and epidemic control, and see to first-aid and referral services. All these are predictable tasks with a low degree of uncertainty.

**Team member proficiency:** School nurses perform formalized activities in an interdependent context. They cooperate with other school health service team members such as doctors, health educators, environmental health officers, school guidance-counsellors, dieticians, nutritionists, school health teachers and social workers. The school nurses' behaviour in this context would include coordinating the activities of other team members by ensuring that adolescent students



have access to the services of their other team members, based on their needs assessment, through referrals.

**Organization member proficiency:** This finds its expression in the way school nurses contribute to the success of other components of the school health programme. According to school health policy, other components include: a healthful school environment, school feeding services, skills-based education, and the relationship between school, home and community. School nurses serve as members of some of these component committees just as they function as resource persons in certain of the respective areas of focus aimed at achieving the overall goals of the school health programme.

**Individual task adaptivity:** This serves to show that some role cannot be formalized, but rather emerge as dynamic, unpredictable markets and rapidly changing technologies, which result in unanticipated changes in work requirements. The role of guiding adolescents by school nurses in decision-making on reproductive health is an emergent one owing to the prominence given to adolescent reproductive health (ICPD, 1994), toward achieving a reduction in the morbidities and mortalities associated with poor handling of their reproductive health. It behoves the school nurses to adapt to this new role situation.

**Team member adaptivity:** This involves school nurses coping with this new role in an interdependent situation. School nurses need to demonstrate their competence as team members toward enhancing adolescents' capacities in making responsible decisions on their reproductive health.

**Organization member adaptivity:** This requires that school nurses make an effective input toward synthesising the contributions of each component of school health programme in achieving in achieving high level adolescent reproductive health which is part of the essence of school health programme, and other activities that promote well-being in the school system.

**Individual task proactivity:** School nurses need to generate initiatives that can support change, and explore the means of expanding their role beyond those occasioned by adaptivity. School nurses are expected to act upon the external environment through their initiative in order to engender positive health outcomes, especially in the area of adolescent reproductive health.

**Team member proactivity:** This entails the self-starting, future-directed behaviour of the school nurses to change a team's situation or the way the team works. School nurses might suggest a collaborative study among team members, on unexplored areas of adolescent reproductive health in order to forestall an unexpected rise in morbidities and mortalities among adolescents in secondary schools.

**Organization member proactivity:** The school health programme is structured in a manner that allows for the contribution of every health and non-health professional to make inputs that could help the programme to achieve its aim. School nurses can influence the direction of programmes by exercising discretion, making strategic suggestions, and engaging in future-oriented behaviour, as members of committees that could integrate the functions of all other components. This will position programmes for better health outcomes.

The nine sub-dimensions of the theory explain what school health nurses do in non-interdependent (independent practice), in teams and in organisations as a whole. The tasks performed express themselves in terms of routine activities such as immunization or referral services, while the adaptive role are emergent role such as guiding adolescents in their decision-making on reproductive health. It was not a role that was envisaged, it emerged as a result of the morbidity and mortality arising from unprotected sex, unwanted pregnancy or unsafe abortion, all of which result from poor decision-making regarding right choices and preferences. Proactivity entails school health nurses exploring areas that are yet to show

themselves, and come to the fore through research endeavours, and using country-based cases in adolescent reproductive health to prepare for such role in the event of their emergence.

### 1.8.2.2 *Adult learning principles*

Adults engage in learning for a variety of reasons. Adult learning, in most cases, is linked to job-related issues such as performance enhancement and better skills acquisition required for effective service delivery. Finn (2011: 34), reporting an outcome of a study by UNESCO, indicates that a vast majority of adults participate in adult education programmes for career- or job-related reasons. Adult learners are inclined to solve practical problems or challenges arising from their work context, hence the need to acquire more skills that help in addressing those challenges (Finn, 2011: 34). Knowles in Merriam (2007: 36) delineates seven assumptions for teaching adults which constitute the principles of adult learning. These are as follows:

- ***The human's self-concept of being dependent changes to that of being self-directed as one attains maturity.*** Adults like taking responsibility for their actions. They also like to be seen and treated as being capable of taking responsibility. In school nursing practice, the school health nurses are expected to discharge their role effectively through enhanced performance. They would readily allow any learning programme that they perceive would help them meet those expectations. They would equally regard these kinds of programmes as being critical to their professional development. The school health nurses (participants) welcomed and embraced the training programme with much enthusiasm, having appreciated its relevance. The facilitator involved them in the learning process and encouraged them in acquiring the skills needed to guide adolescents in their decision-making on reproductive health.
- ***Experience influences an adult when he or she is learning.*** The experience which has been accumulated over time is brought to the learning process. Adults tend to draw on their experience when they learn new things. School health nurses connect their life

experiences, which are an interplay of their background and education, to new information. Such experience is a resource for themselves and other learners, and gives richer meaning to new ideas and skills. Experience serves as a source of school health nurses' self-identity as it mirrors their individual background, which includes values, cultural preferences, opinions, as well as those norms and values that are garnered from the institution during the period of their training. The facilitator allowed for trainees' (participants) input, and this was critically examined in relation to whether they showed an awareness of the expectations, the knowledge and the skills needed for assisting adolescents in their decision-making on reproductive health.

- ***Adults tend to show motivation for learning if they find that the learning will help their personal development.*** Adults are inclined to be more internally motivated than externally. School health nurses may demonstrate both intrinsic and extrinsic motivation to learn. They need to learn in order to achieve recognition, and be appreciated by their clients and the teaching staff in the school environment. Training will enhance their performance, which may put them in line for career advancement, with the attendant perks and privileges. To this end, participants were shown how the training programme will be of benefit to them. The trainer provided a challenging learning environment for them to achieve the desired goals. The environment was conducive to learning and all the necessary audio-visual materials were made available.
- ***Adults tend to show more interest in learning that addresses immediate problems or challenges.*** The adult is more problem-centred than subject-centred in the learning situation. School health nurses, as the research findings show, lack adequate knowledge and the skills needed to enable them to guide adolescents in their decision-making about reproductive health. To this end, they were made to understand the essence of the training programme, which was essential in bridging the knowledge and

skills gap. They felt convinced that it would help them in updating their knowledge and skills in the act of guiding adolescents in their decision-making on reproductive health. They also valued the training programme in other role performance areas in the school environment. The facilitator had extensive discussions with the school health nurses about how the training programme would positively affect every facet of their role.

- ***Adult learners need to be respected.*** Being adults who set out to embrace learning that will help them address practical challenges that require knowledge and skills enhancement, they need to be treated with dignity. The facilitator created a conducive but challenging learning environment for the school health nurses who participated in the training programme. They were allowed to ask questions freely, seek clarification, and were encouraged to make their input with room for constructive criticism. They were commended for their contributions. This enabled them to mix freely among themselves and relate well to the facilitator. They were assisted when faced with challenges on skills application regarding the guidance of adolescents in their decision-making about reproductive health.
- ***Adults learn best when they are active participants in the learning process.*** Put differently, adults seem to gain more from the learning process if they are allowed to be active participants in the tasks, to be allowed to discuss issues freely and not be mere passive listeners in lectures only. In the course of the training programme, the school health nurses were encouraged to ask questions and participate in all the activities that were prepared for them. The facilitator encouraged them to share their personal experiences with one another, and led exercises that would enable them to learn to guide adolescents in their decision-making about reproductive health.

- ***Not all adults learn in the same way.*** Individual variability allows for different means of acquiring knowledge and skills. Adult learners may have preferences for different means of obtaining knowledge and skills. The school health nurses who participated in the training programme were presented with a spectrum of skills delivery modes; these included lectures, discussions, role play, and case studies. This offered them a wide range of opportunities to learn and acquire skills needed for guiding adolescents in decision-making about reproductive health.

### 1.8.2.3 *Experiential learning*

In view of the fact that there are different ways adult individuals learn to acquire knowledge and skills, there was a need to utilize a framework that takes a holistic view of all learning styles. School health nurses as adult learners have their preferred styles of acquiring new knowledge and skills that will aid their performance. The researcher employed Kolb's experiential learning cycle to situate the activities and instructional/teaching methods. Kolb's experiential framework is an integration of the work of Kurt Lewin and John Dewey who wrote on and conducted research in experiential learning. Kolb created a model of learning which emphasizes the interplay of experiences including cognition, environment and emotions as they influence the learning process (Griffin & Keen, 2013: 5). The Experiential Learning model displays two forms of experience which are *Concrete Experience (CE)* and *Abstract Conceptualization (AC)*; and two modes of transforming experience which are *Reflective Observation (RO)* and *Active Experimentation (AE)*. These constitute four stages as depicted by Kolb in the learning cycle. Concrete experience takes place when the learner is exposed to an activity such as instruction, and this is followed by reflective observation in which a learner thinks and ponders on what he has learned i.e. experience. Abstract conceptualisation takes place when a learner is trying to make sense of reflections on concrete observation, and its distillation into concepts, finding out why it happens. Active experimentation entails testing

the concepts in order to serve as guides in generating new concrete experiences (Kolb & Kolb, 2008: 6). The idea of learning styles demonstrates the preferences which are a function of individual differences in learning. The interplay of the four stages produces four personal learning styles which are Theorists (Assimilator), Pragmatists (Converger), Activists (Accommodator) and Reflectors (Diverger). An individual with an *assimilating style* has *AC* and *RO* as leading learning abilities. Individuals who possess these abilities are good at understanding a broad spectrum of information which can be transformed into a succinct and analytical form. In formal learning environments, they prefer readings, lectures, exploring analytical models, and having time to think through while the instructional approach for them involves using case studies, readings, and thinking alone. An individual with a *converging style* has *AC* and *AE* as central learning abilities, and focuses on how to apply ideas to practice. Put differently, attention is directed toward converting ideas to skills which are applicable in practical situations. They are inclined toward solving problems, and making decisions based on finding solutions to questions or problems. People with this style prefer technical tasks and problems (laboratories, fieldwork, or observation). The preferred instructional approach entails the use of feedback and activities that apply skill. Individuals with an *accommodating style*, with *CE* and *AE* as main learning abilities, have flair for “hands-on” experience. They have a penchant for carrying out plans and involving themselves in new and challenging experiences. They depend on other people for information rather than their own technical analysis. The instructional approach for this type of learner involves the use or practice of the skill, problem-solving, small group discussion, and peer feedback. The fourth learning style is the *diverging* type which has *CE* and *RO* as the dominant learning abilities. Individuals demonstrating this style are best at looking at concrete situations from different perspectives. They perform well in situations where brainstorming is required for the generation of ideas. They prefer working in groups, listening with an open mind and receiving personalized feedback. The preferred

instructional approach includes lectures and plenty of reflection time (Kolb & Kolb, 2008: 10). Kolb's experiential learning theory enables the use of a broad range of teaching methods in a training programme just as it creates awareness about the way a combination of different learning styles could be made for effective learning (Healey & Jenkins, 2000: 185).

### 1.8.3 Theoretical concepts

**School health nurse:** By this is meant a registered specialist nurse committed to the advancement of the well-being, academic success, and lifelong achievement of students by facilitating positive student responses to normal development; one who promotes health and safety, intervenes in actual and potential health problem scenarios, provides case management services, and actively collaborates with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning (Magalnick & Mazyck, 2008: 1). School health nurses, by virtue of their academic and professional exposure, are placed in an advantageous position to render reproductive health services to the adolescents in the school environment. This includes the provision of necessary guidance in their decisions about reproductive health.

**School nursing:** This is an arm of nursing entrenched in the school health service, and is domiciled in the school environment. School nursing is defined as a “specialized practice of professional nurses that advances the well-being, academic success, and lifelong achievement of students, and to this end, school nurses facilitate positive student responses to normal development, promote health and safety, intervene with actual and potential health problems, provide case management services, and actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning” (National Association of School Nurses, 2011: 1). School represents the second-most influential context in an adolescent's life, and to this effect, the school health nurses have a role to play in helping



adolescents live a responsible reproductive life through the provision of guidance on their decisions in this very vital area.

**Adolescence:** It is the period in human growth and development that occurs after childhood and before adulthood, from 10 to 19; it represents one of the critical transitions in the lifespan and is characterized by tremendous growth and change that is second only to infancy (WHO, 2014; UNICEF, 2011). This stage of individual development forms the bedrock of the study as attention is focused on how the individuals in this stage make their decisions in the critical areas of reproductive health just as the successful negotiation of this stage will engender their physical and psycho-social well-being.

**Reproductive health:** The International Conference on Population Development (ICPD) defines reproductive health as “a state of physical, mental, and social well-being, and not merely an absence of disease or infirmity, in all matters relating to reproduction and to its functions and processes (Panda & Seghal: 2009: 445). Adolescent reproductive health is receiving greater attention globally owing to the dangers associated with the sexual behaviour of teenagers. Adolescents constitute a vulnerable population (Zuo et al., 2012: 18; Morhason-Bello et al., 2008: 90) that should engage the attention of all stakeholders, including nurses.

**Decision-making:** Decision-making is a process that chooses a preferred option or a course of action from among a set of alternatives on the basis of given criteria or strategies (Wang & Ruhe, 2007: 73). Decision-making by adolescents is highly essential as its outcome determines their reproductive health outcomes.

**Intervention:** Intervention is behaviour designed to alter the environment or its relation to the environment, or more specifically, as a “therapist’s direction of or influence on a client’s actions” (Schilling, 1997: 173). Intervention programmes for school health nurses will help them in facilitating the guidance of adolescents in their decisions on reproductive health.

## 1.9 JUSTIFICATION OF THE STUDY

The outcome of the International Conference on Population Development held in 1994 in Cairo, Egypt brought about an attention shift toward adolescent reproductive health which arose against the backdrop of an alarming rate of sexually transmitted infections and HIV/AIDs, especially among adolescents, leading to high morbidity and mortality. This shift in attention places some burden on school health nurses in terms of how they can assist adolescents in making decisions that could bring about positive reproductive health outcomes. Decision-making has been identified as one of the life skills that must be taught to adolescents in order for them to be able to make informed decisions about their reproductive health. School health nurses need to be well equipped to face the challenge of providing adequate guidance to adolescents in their decision-making on reproductive health. School health nurses must understand how adolescents make their decisions before they effectively provide them with guidance support. Adolescents are naturally inclined to feelings of invincibility, which forms the basis of their risky decisions. Adolescents nowadays are exposed to greater risks owing to highly developed and sophisticated information technology. This exposure increases their adventurous predisposition. They experiment with sex, drugs and alcohol and this complicates their risky decisions. Adolescents are still undergoing changes that will propel them to adulthood. Most of their decisions seem questionable if not irresponsible, especially in the area of reproductive health issues. Many of them seek information from their peers in making some critical decisions in reproductive health. Adolescents spend a considerable part of their lives in the school environment, and this constitutes the second-most influential environment on adolescents. They are thus in constant contact with school health nurses. Decision-making is a complex issue for adolescents, and it requires that school health nurses are well equipped to guide them properly. The available evidence has indicated their willingness to perform this role. In view of the fact that their preparation in that direction may fall below expectations, the

researcher had the conviction that if an intervention programme could be developed for school health nurses, they are likely to improve on their performance in the provision of guidance to adolescents in their decision-making about reproductive health.

### **1.10 LAYOUT OF THE THESIS**

Altogether, ten chapters constitute the core of this thesis. The chapters were arranged in line with research methods progression.

Chapter One: This chapter describes the overview and the background of the study.

Chapter Two: The chapter discusses the literature review.

Chapter Three: This chapter extensively describes the methodology of the study.

Chapter Four: The presentation and discussion of findings constituted the core of this chapter.

Chapter Five: The presentation of the outcome of information gathering and synthesis of Intervention Design and Development took place in this chapter.

Chapter Six: This chapter describes the activities that took place in the design phase of the study.

Chapter seven: The chapter focuses on the development of the intervention programme.

Chapter Eight: This chapter entails the description of pilot testing of the intervention programme.

Chapter Nine: The chapter describes the summary, limitations, recommendations and conclusion of the study.

## **CHAPTER TWO: OVERVIEW OF LITERATURE**

### **2.1 INTRODUCTION**

This section deals with an overview of literature on adolescence, adolescent growth and development, adolescent reproductive health, the adolescent and the decision-making process, and school nurses and adolescent reproductive health. The literature overview provides guidance and direction to the study with a perspective informed by the knowledge of what has been done in the chosen area, the literature on the issue, the context, methods used, the strengths and the weaknesses of the research activity. Boote and Beile (2005: 3) argue that literature highlights the scope of investigation, and sets an existing literature in a broader scholarly and historical context, and that it enables the study to be subject to critical examination in respect of the research methods used in order to establish whether the claims are valid. Two major reasons have been identified for conducting a literature review. These are: conducting primary research, and serving as an end in itself (Mertons, 2014: 90). The purpose of literature review in qualitative study is to guide the researcher toward learning, and collecting information from the participants' perspectives rather than imposing questions to be answered by the researcher (Creswell, 2009: 26). The author further observes that this is the nature of literature review associated with exploratory study. Lincoln and Guba in Bowen (2008: 138) are of the view that exploratory study is embedded in naturalistic enquiry, which entails research in a natural setting where participants freely express opinions without being manipulated.

### **2.2 The concept of adolescence**

A wide range of schools of thought have defined adolescence as a “transitional period between childhood and adulthood”, while some describe adolescence as the life period that begins with the onset of puberty and ends when an individual is economically self-sufficient and has taken on several adult role (Jaffe, 1998: 25). One significant aspect of this description concerns the point at which an individual can reasonably claim that he or she is mature, and ready to take

on several adult role. In contemporary times, against the backdrop of population explosions and rising waves of unemployment, the description of that period may have to shift to accommodate these developments. To some, the period is blurred, hence the lack of consensus on the definition. In view of these contradictions and inconsistencies, the World Health Organisation (2013) defines adolescence as the “period in human growth and development that occurs after birth and before adulthood, from ages 10-19”, while an adolescent is regarded as “young people between the ages of 10 and 19 years”. Adolescence is a time of life of intriguing and, perhaps, complicated stages, a time when young people take on new responsibilities, and experiment with independence (UNICEF, 2002). The individuals search for identity, learn to apply values acquired in early childhood and develop skills that will help them become caring and responsible adults (UNICEF, 2002). In the course of searching for identity and asserting their independence, challenges may arise which, if not well managed, can result in crises. Identity has been defined as the “conspiracy of biological endowment, personal organisation of experience, and cultural milieu to give meaning, form, and continuity to one’s unique existence.” (Kroger, 1989: 14).

### **2.3 Adolescence: historical perspectives**

Plato in Santrock (2010: 5) posits that reasoning does not belong to childhood but rather first appears in adolescence. Plato thought that children should spend their time in sports and music, whereas adolescents should study science and mathematics. Building on this premise, Aristotle argued that the most important aspect of adolescence is the ability to choose, and that self-determination is a hallmark of maturity (Santrock, 2010: 5). In the middle ages, children and adolescents were viewed as miniature adults, and were subjected to harsh discipline (Santrock, 2010: 5). In the eighteenth century, French philosopher Jean-Jacques Rousseau offered a more enlightened view of adolescence, restoring the belief that being a child or an adolescent is not the same as being an adult, and argued that reasoning develops in adolescence (Santrock, 2010:

5). Stanley Hall proposed that adolescent development is controlled primarily by biological factors. The invention model contradicted the position of Hall on adolescent development and emphasized that “a society perceives and employs its young people according to its current economic and political needs.” (Jaffe, 1998: 13). An agricultural society sees young people as manual labourers. Mead’s position on adolescence differs from Hall and the Inventionist model trajectories. Mead offers a socio-cultural view of adolescence, having studied adolescents on the South Sea Island of Samoa (Jaffe, 1998: 13; Santrock, 2010: 6). Present-day perceptions of adolescence draw from previous descriptions of the stage, i.e. they encompass socio-cultural as well as biological factors.

#### **2.4 Cross-cultural views of adolescence**

Several attempts have been made to create a unified system of analysis for adolescence across all cultures. These efforts have proved futile as cultural variations have complicated these endeavours. Hendry and Kloep (2012: 38) give an account of some of the differences, basing their assertions on empirical data. For example, teenage pregnancy is regarded as a non-normative social problem in Britain, but in some other countries, it is normative and even culturally desirable, and the teenage mothers are usually married. Jaffe (1998: 21) observes that more than half of all societies mark the transition from childhood to adulthood with rituals. This is known as the coming-of-age day in Japan. The transition is typically accompanied by traditional food, songs, and clothing, initiation rites including fasting and prayer, formal ceremonies, and other ways of instantly conferring adult status and privileges. In Native American tribes, there is ‘vision quest’ whereby 14 and 15 year old boys are brought individually into a sweat lodge where their bodies and spirits are purified by the heat of burning cedar. Jaffe (1998: 21) further observes that these rites of passage are lacking formally in western cultures, including the United States and Canada. However, privileges are granted largely on the basis of age. In contrast, many ethnic, religious, and other sub-cultural groups in

the West arrange ceremonies such as confirmations and bar mitzvahs to symbolize the child-to-adult transition. In Sudan, the concept of adolescence, according to Ahmed (2012: 74) is usually employed when criticizing adolescents' misbehaviour. Adolescence is also labelled in Arabic as 'muraḥagah' which means suffering in controlling sexual urges and behaving as a mature person. The term 'biluq' is used at the beginning of sexual development, while 'muraḥagah' is applied when the child is functioning as a sexually mature individual (Ahmed, 2012: 74). Tschombe and Lo-oh (2012: 3) say that puberty is a period marked by sensitization to appropriate gender identity and role. Among many ethnic groups in Cameroon, adolescence is ushered in by puberty rites of initiation. The age period 12-15 is marked by retreat and isolation in gender groups, in preparation for the transition to adulthood. Boys are given instructions about their role as men, and girls are trained to be good wives and mothers. In Nigeria, many communities have ceremonial rites of passage that are arranged to support adolescents in their own transition to adulthood. Rites as social system strategies assume a prominence that helps to provide a structural, formalized, and holistic process through which adolescents develop competencies (Ibeagha, 2012:62). The Ogori people of Nigeria organise a three-month festival to mark puberty, during which there is confirmation of a girl's chastity and the forecast of her future by the oracle of the community, while the Ijaw people of the Niger Delta perform clitoridectomy (removal of the clitoris) on their female adolescents, and this is believed to prevent difficult labour during childbirth. The Fulani culture engages in 'Shadi', a festival of flogging the adolescent male, to prove his maturity and courage (Ibeagha, 2012: 62). Chaudhary and Sharma (2012: 103) offer an account of adolescence in India. They are of the opinion that in Indian thought and writing, the idea of adolescence per se is rather ambiguous. The personal distance between adolescents and adults is not experienced where young people spend more time with their families than away from them. On the other hand, in the Hindu worldview, the idea of 'kishoreawashata' places the pubescent child (particularly the

male child) away from the family for a period of learning, dedication, and service. According to the UNFPA Report (2000), at the macro level, Indians have a basic resistance to any delay in the onset of puberty due to malnutrition and the prevalence of early marriages. This leaves little or no time between the beginning of puberty and the entry to adult role and responsibilities for a large majority of adolescents. Mejia-Arauz, Sheets and Villasenor (2012: 196) observe that the idea of adolescence was not yet known in Mexico at the beginning of the twentieth century. Work and marriages marked the transition from childhood to adulthood. In rural communities, men usually married at 18 or 19 years of age, and women at 16 or 17, whereas in cities, men married at around 23 and women at around 20. Most adolescents consider adolescence to end not at a certain age but according to one's responsibilities and circumstances. For example, adolescence ends once one starts working, has children, formalizes a relationship with someone else, uses drugs, goes to jail, or getting involved in prostitution (Mejia-Arauz et al. 2012: 196). Cottelino and Bonio (2012: 292) observe that this representation of adolescents, especially teenagers, is quite negative, and does not correspond to reality. Mass media greatly emphasize negative events (for example, suicides and acts of aggression) in spite of statistical evidence to the contrary. Cross-cultural views of adolescence show that the prevailing pattern is that there is indeed an extended adolescence, and the emergence of a new developmental period referred to as "emerging adulthood" (Seginer & Shoyer, 2012: 29). The delayed entrance to adulthood has caused the economic, political, and military advancement to be slower and young soldiers (aged 18-21) are often referred to as 'children' (Seginer & Shoyer, 2012: 29). The above narratives imply that there is no single lens one can use to view adolescence across different cultures. Implicit in the narratives are different patterns in the responses of adolescents to the socio-cultural demands of their respective contexts. These societies are divided along age and gender differences.



## 2.5 The adolescent's growth and development

Sigelman and Rider (2006: 297) hold that there is no period in the life span that is more important to the development of the self than adolescence. The authors argue that this period is truly a time for “finding oneself” as research on adolescent self-conceptions, self-esteem, identity formation, and vocational choice illustrates. Jaffe (1998: 45) identifies the three domains of developmental change in adolescents as follows: the physical domain, which entails growth and maturation-heredity, physical growth, sensory and motor development, and sexual maturation; the cognitive domain –this entails how we know the world i.e. development of perception, memory, learning, thinking, reasoning, problem solving, intelligence; the psychosocial domain which encompasses changes in personality, emotions, and social behaviour. In view of adolescent development, a considerable number of perspectives emerged in the course of explaining the process. Hendry and Kloep (2012: 11) reveal that Havighurst's developmental theory explains the tasks an adolescent faces in this way, that each time he or she encounters or solves a new ‘developmental task’, development occurs. They refer to developmental tasks as ‘major accomplishments’ that are required at certain points in life, and these are developmentally sequential to some extent. The authors identify as examples of these major accomplishments the achieving of emotional independence, choosing of a career, and the development of an ethical system. The Psychosexual perspective offers a ‘storm and stress’ view of adolescence, emphasizing the role that family conflict and sexual tension play in motivating adolescent behaviour. Within this paradigm adolescence is viewed as a psychological reaction to puberty, a stage during which adolescents experience a variety of powerful impulses, including sexual feelings, toward the opposite gender parent, and rivalry with the parent of the same gender. For example, boys feel attracted to their mothers, and competitive with their fathers (Jaffer, 1998: 54). This situation increases tension which causes “both painful and pleasurable sensations, to which a person must and will adapt in various

ways.” (Jaffer, 1998: 54). Peter Blos in Adelson and Doehrman (1980: 110) delineates three phases of adolescence: latency, early adolescence, and adolescence proper. Latency is characterized by sexual inhibition and by a considerable increase in control of ego and superego over the instinctual life. Ego functions and skills are enhanced, as are the child’s resources. This period of relative quiescence is brought to an end by the instinctual upsurge that characterizes puberty. In this phase, the child is so intent on warding off instinctual dangers that he or she becomes difficult to reach, to teach, and to control. In the boy, castration anxiety reappears in relation to the archaic phallic mother so that the male preadolescent central conflict involves a fear and envy of the female, feelings often defended against by homosexual defense. (It might be remarked here that this differs from the second homosexual phase in early adolescence, wherein the same sex is taken as a love object; the homosexual defense in preadolescence lacks the erotic component that it takes on in the later period.) As for the girl, she is defending herself against a regressive pull toward the pre-oedipal mother by a forceful turning toward heterosexuality. It is she, therefore, that tends to become aggressor and seducer, and this tendency is reinforced by the fact that the girl at this stage (between 11 and 13 approximately) is generally taller than the boy (Adelson & Doehram, 1980: 111). The early adolescence is marked by the youngster turning away from the primary incestuous love object in the relationship to the friend, who is then idealized. There is a diminution of sustained interest in creativity as the child appears to grope for values that are in opposition to those of his/her parents. The parents’ internalized moral injunctions become suppressed so that the superego weakens and tends to leave the ego weak and self-control inadequate (Adelson & Doehram, 1980: 111). The end of early adolescence and the entry into adolescence proper is marked by heterosexual object-finding; this signals the first renunciation of the incestuous object and a decisive break from childhood. The adolescent abandons the bisexuality of the earlier stage along with pre-oedipal and oedipal attachment, turns to genitality, and chooses a

non-incestuous heterosexual object. This phase (also referred to middle adolescence) marks the disengagement with the primary love object. Adolescence proper entails an increase in narcissism, reflected in the self-absorption, extreme touchiness, and self-aggrandizement so often observable in youngsters at this time. Cognition becomes increasingly objective and analytical; the reality principle assumes increasing dominance. Erikson's psychosocial theory differs from the psychodynamic perspective in that the emphasis is on environment, rather than psychosexual development, and on conscious forces rather than unconscious processes. The core concept in Erikson's theory is 'ego identity', which is defined as 'a basic sense of who we are as individuals in terms of self-concept and self-image.' (Dunn & Craig, 2013: 13) Erikson's position is that "a major force in human development is culture within which one is raised". He later found common ground with Freud when he asserted that "the ways in which an individual resolves the conflicts inherent in an earlier stage of development exert a strong influence on how later development unfolds." (Dunn & Craig, 2013:13) The intellectual and cognitive development of the adolescent is the focus of Piaget, who posited that adolescents between the ages of 11 and 14 experience metamorphosis in thinking and reasoning ability. Their thinking is more adult than child-like. Piaget described this stage as 'formal operational' which reflects the ability of adolescents to think logically about abstract and hypothetical events (Jaffe, 1998: 124). The weakness of these perspectives is that none fits into any of the life stages. They cannot really describe everyone's life. There are too many exceptions which compromise the strength of these generalisations and their being accepted as universal perspectives (Hendry & Kloep, 2012: 15). It has been observed that the commonality or the central theme in all the perspectives is 'identity'. Identity is defined as "a perception of oneself as having continuity and sameness, despite changes in physical appearance and life situation." (Hopkins, 1983: 11). Neller and Callam, (1991: 14) observe that those who have a firm sense of their own identity are likely to relate best to others, especially in intimate relationships.

While examining the effects of family dynamics on the development of autonomy, and the adolescent's 'willingness to explore identity, Neller and Callam (1991: 16) assert that the parents' use of power in the family is a crucial determinant of the willingness of adolescents to be involved in identity exploration. The authors indicate that adolescents whose parents are authoritarian and coercive in their relationship with them are a) less likely to engage in exploring identity alternatives, b) more likely to adopt external, rather than internalized moral standards, c) likely to have lower self-confidence and self-esteem, and d) likely to have problems in using their own judgement as a guide to behaviour.

Further to the discussions on growth and development of the adolescent, the socio-cultural perspective emphasizes that human development results from dynamic interaction between developing persons and their surrounding society and culture (Berger, 2005: 46). Society and culture are not simply external variables that impinge on the developing person, they are integral to development (Berger, 2005: 46). Arising from this standpoint, it can be concluded that the adolescent's perceptions, behaviour, and conduct will be shaped and influenced by the context in which they find themselves. In addition, the cross-cultural perspectives on adolescence reflect the gender and age dichotomies. The adolescent's outlook will be a function of the constellation of these correlates.

## **2.6 Adolescent and reproductive health**

Sawyer, Afifi, Bearinger, Blakemore, Sarah-Jayne and Dick (2012: 1630) posit that the present generation of people aged 10-24 years is the largest in history, with a population of 1.8 billion (a quarter of the world's population). Nearly 90% live in low- income and middle-income countries where they constitute a far greater proportion of the population because of higher fertility rates (Sawyer et al. 2012: 1630). According to these authors the growth in adolescent populations coincides with a reduction in infectious diseases, malnutrition, and mortality in infancy, and early childhood. This shifts attention to sexual and reproductive health, substance

abuse, mental health, injury, obesity, and chronic physical illness, which have become prominent during adolescence and need very different responses. Lloyd in World Health Organization (2010: 10) indicates the distribution of the leading causes of death among young people aged 15-29, which shows that two of the six major causes of death are related to reproductive health – namely maternal mortality and mortality due to HIV. In a related development, Blum in Fatusi and Hindin (2010: 499) notes that the causes of deaths of young people are associated with behavioural tendencies exacerbated by national policy, or failures of health service delivery systems, or both. The author identifies sexual and reproductive health issues as the leading health challenges facing young people and adolescents. Glassier, Gulmezoglu, Schmid, Moreno, Van Look (2006: 1595) argue that “unsafe sex is the second-most important risk factor for disability and death in the world’s poorest communities, and the ninth-most important in developed countries.” They argue that sexual and reproductive ill health mostly affects women and adolescents, and the services to address this ill health are deficient or of poor quality, and underused in many countries because discussion of issues such as sexual intercourse and sexuality makes people feel uncomfortable. Morhason-Bello, Oladokun, Enakpere, Fabamowo, Obisesan, and Ojengbede (2008: 90) reveal, in a study on sexual behaviour of in-school adolescents in Ibadan, that the increasing rate of premarital sex and the drop in age of sexual debut among adolescents, contrary to our moral and cultural beliefs, are related to high poverty levels, the adoption of western norms of sexual liberty, a gradual erosion of traditional norms/values, a lack of parental control, and the influence of mass-media, urbanization and tourism. Consistent with this line of thought, Mudhovozi and Ramarumo (2012: 121) argue that the patterns of sexual activity among adolescents and young people in many third-world countries are similar. This might be informed by the fact that most of the third-world countries are afflicted with poverty. They further posit that the majority of young people are sexually active by the age of twenty, and premarital sex is common among

those aged 15-24. In expanding their discussion, they indicate that many adolescents are infected with HIV because of physiological vulnerability, peer pressure, their tendency to engage in risk-taking behaviour, inability to negotiate safer sex practices and difficulties in accessing health information and services. The International Conference on Population Development (1994) defines reproductive health as “a state of complete physical, mental and social wellbeing, and not merely an absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes” Implicit in this definition is the assumption that people are able to have a satisfying and safe sex life, and that they have the ability to reproduce and the freedom to decide if, when and how often to do so (ICPD, 1994). ICPD set up an action plan for the implementation of the reproductive health programme. However, considering the level of maternal mortality, HIV/AIDS, unsafe abortion, teenage pregnancy and parenting, it is apparent that not too much has been achieved in this direction (UNICEF, 2009: 2). Each year, more than half a million women die from causes related to pregnancy and childbirth (UNICEF, 2009: 2). In situating the slow progress achieved in implementing reproductive health, a critical analysis and examination of sexuality provides some reasonable clues. ‘Sex’ can refer to two things: 1) sexual behaviour, consisting of the acts that people engage in to achieve pleasure, 2) the anatomical and reproductive differences that men and women are born with, or develop (Williams & Stein, 2002: 1). Freud viewed sex as “the core of the self, and it is the drive for erotic pleasure that places the individual in conflict with social norms of respectability and self-control” (Seidman, 2003: 7). Tamale (2011: 11) states that sexual dimensions include sexual knowledge, beliefs, values, attitudes and behaviours, as well as procreation, sexual orientation, and personal and interpersonal sexual relations. Sexuality touches a wide range of other issues including pleasure, the human body, dress, self-esteem, gender identity, power and violence. In effect, it is a deeply complex phenomenon, and its examination should be tailored to reflect its nuanced, contextual and

multileveled nature. Sexuality can be viewed from a cultural as well as scientific perspective (Rivkin-Fish, Adam & Pigg, 2005: 5; Ortner & Whitehead, 2005: 1). The authors argue that gender, sexuality, and reproduction are treated as symbols invested with meaning by the society in question, as are symbols. They share the view of gender and sexuality as meaningful symbolic forms that require interpretation before explanation unites the picture as a whole. Constructionism illustrates how sexuality exists within the systems of meaning and representations they sustain (Rivkin-Fish, Adam & Pigg, 2005: 5). With the emphasis on historical change and context, constructionism is wary of generalising explanations of sexual meaning, motives, and practices, and within the constructionist perspective, all sexualities are local (Rivkin-Fish, Adam & Pigg, 2005: 5). Following from the above, normative sexual patterns emerge as a result of the constructionist perspective. Laumann, Michael and Michaels (1994: 511) identify three major normative orientations toward sexuality. The first is generally referred to as 'procreational' because it is based on the assumption that the primary purpose of sexual activity is to reproduce. The second orientation is a 'relational' one, and is based on the idea that sexual activity is a natural component of an intimate, loving relationship. This orientation allows for premarital sex within the context of a loving relationship, while the third orientation is called 'recreational', and is based on the premise that pleasure is the primary purpose of sexual activity. This orientation essentially allows for any type of sexual activity among adults. Sexual orientation and gender identity constitute the two largest differences in behaviour between men and women (Sanchez, Sanchez & Danoff, 2009: 713). Sexual orientation refers to the direction of sexual attraction to the same or other sex or gender, while gender identity refers to people's inner sense of maleness or femaleness (Sanchez, Sanchez & Danoff, 2009: 713). The authors submit that prenatal hormones of gonadal origin play a major role even though this is not the only factor. This view is largely supported by Hines (2006: 115), who anchors gender identity on the level of androgens present in the foetus at critical

times in its development. The author further argues that biologically, males are more vulnerable to disease and have a shorter lifespan than females. In addition, males mature later than females and have greater muscular strength and body size. The assertion of male vulnerability aligns with the insights of Becker, Monteggia and Perrot-Sinhal (2007: 11851), whose study shows that females show both heightened stress sensitivity and an increased susceptibility to emotion-based diseases, including depression. Lippa's study on gender difference (2005: 2) posits that the two sexes are rarely, if ever, the opposite of each other, and that the issue of difference lies within the aggregate of attributes each gender possesses, thus making men and women appear more similar than different. Sexual identities are inclined toward heterosexuality, homosexuality and lesbianism (Hines, 2006: 115; Holland & Adkins, 1996: 10; Bhattacharyya, 2002: 47). Of the three forms, heterosexuality appears to be the dominant sexual identity. This is a function of the reproductive role of humans, and the patriarchal arrangement of the societies which reflects the power relations between the two genders (Bhattacharyya, 2002: 18). Heterosexuality has been defined as the "primal scene of sex, with one man and woman, drawn together by their instinctual need to reproduce, unhampered by the confusion of culture or social expectations because the penis finds the vagina of its own accord, as its biological destiny." Put differently, heterosexual relationships are seen as being both statistically and culturally normative. Bhattacharyya (2002: 18) further posits that one of the problems of normativity is that it may seem to be unproblematic, unconstructed, and indeed, 'natural'. Same-sex desires can be explained using different perspectives. The bio-genetic explanation of homosexuality finds its expression in the hormonal differences during prenatal development, as these might be involved in the shaping of sexual orientation. For example, women who had been exposed to high levels of androgens during their foetal development are much more likely to become lesbians than their sisters who were not similarly exposed (Bernstein, Clark-Stewart, Roy, & Wickens, 1997: 353). The authors observe that such hormonal influences alter the



structure of the hypothalamus, a region of the brain known to underlie some aspects of sexual functioning. Pillard and Bailey (1998: 347; Bernstein et al. 1997: 353) studied twin brothers of homosexual men, and found that among the identical twin brothers, 52 percent were homosexual, as compared with 22 percent of fraternal twin brothers. Identical twins share all their genes, whereas fraternal twins are like ordinary siblings in that they share only about half of their genes (Atkinson, Atkinson, Smith & Daryl, 1996: 371). A follow-up study of homosexual women reveals that 48 percent of their identical twins were homosexual, as were 16 percent of their fraternal twins. Discrepancies are usually found in the way males and females express their sexuality. The suppression of female is commonplace in some societies, and it is a pattern of cultural influence by which girls and women are induced to avoid feeling sexual desire and to refrain from sexual behaviour (Baumeister & Twenge, 2002: 166). The authors argue that suppression involves the message that sex is bad rather than simply the failure to teach that sex is good. They further reveal that most cultures exhibit double standards in respect of human sexuality. The double standard has consisted of judgments that certain sexual behaviours are acceptable for men but unacceptable for women, which is one sign that some messages of sexual restraint have been aimed primarily at women (Baumeister & Twenge, 2002: 166). However, the feminists (Kitzinger, 1996: 15) argue that the everyday personal choices made by women in their private lives are irrevocably and inextricably connected to women's powerlessness under male supremacy. Whitford (1991: 22) observes that the culture of the west is mono-sexual, i.e. that the status of the women is that of 'lesser men', inferior or defective men. The author suggests that the only way in which the status of women can be altered fundamentally is by the creation of a powerful female symbolic to represent the other term of sexual experience. Normative sexual patterns arise from socializing influences. McCarthy and Edwards (2011: 184) define socialisation as "the process by which children, and also adults learn all aspects of the behaviours and customs of the social groups in

which they find themselves". Talcott Parsons argues that the most important functions performed by the nuclear family are the socialisation of children, and the provision of psychological supports for adults (Brown & Wilson, 2005: 185). Implicit in this definition is the central role the family plays as an agent of socialisation. The question of how children internalize societal values generates discussion on the strategic influence of parenting styles on the acquisition of those values. The parenting style adopted by a family will determine the identity formation of an adolescent. Hoghughi (2004: 5) defines parenting as 'purposive activities aimed at ensuring the survival and development of children.' Four types of parenting styles have been identified. These are: authoritarian, authoritative, neglectful and permissive (Shucksmith, et al. 1995: 253) The authoritarian style rigidly enforces rules and this is allied to low levels of acceptance. The authoritative style combines reasoned control with support and coercion in that it involves setting firm limits whilst demonstrating acceptance by explaining the reasons behind policies and by encouraging exchange between parent and child. Permissive parenting is associated with acceptance of children's behaviours and attitudes as appropriate, while neglectful parenting is associated with low levels of control, and low levels of acceptance. All of the above, with the exception of the authoritative style, will not encourage positive identity formation, even though neglectful parenting could encourage autonomy at too early an age, which could put adolescents at risk from peer pressure just as too-controlling families may also put children at risk of peer pressure (Shucksmith et al. 1995: 253). The authors further submit that parents' use of power is critical to the shaping of adolescent identities, through the influence that this exerts on the individual's willingness to be involved in identity exploration. Coercion rather than inductive methods of parenting, combined with low levels of support, are seen to produce problems of identity formation, externalized moral standards, a susceptibility to peer pressure, and lowered self-confidence and self-esteem. Besides family, another powerful agent of socialisation is religion.

## **2.7 Religion's views on sexuality**

Religion is communication and/or practice that refers to a supernatural-transcendental-reality (Kohrsen, 2012: 273). It is an important factor in societal integration, and potentially strengthens the bond between the individual and society (Roislen, 2013: 213). In examining the role of religion in society, Williams and Josephson (2013) argue that religions provides succour to individuals just as they shape the context, norms and acceptable ways of being in a nation. They further posit that religious involvement exposes youth to homophobic or racist attitudes. Religious views on sexuality are not uniform, even in the same denomination. Some express conservative views while others are moderate or liberal in their outlook. The Catholic Church opposes abortion. Within this worldview it is forbidden, and heteronormativity is seen as a means of transmission of new life (Inglis & Mackeogh, 2012: 68). Aligning with the Catholic view but with some slight difference, the Anglican Church's official teachings on human sexuality stress the sanctity of sex within the framework of heterosexual marriage. This has generated some tension between the conservative and liberal wings within the Church of England, and the worldwide Anglican Communion, in that there are significant differences in perceptions of heteronormativity (Gross & Yip, 2010: 40). The Islamic view is highly conservative, and emphasizes that sexual relations should only take place within heterosexual marriages (Nurish, 2010: 267). The rule is that sex should not be discussed solely for its own sake or for pleasure. The Islamic view of sexuality supports and defends patriarchal power. Islamic sexual ethics emphasize that women's virginity before marriage is highly valued, whereas the issue of men's virginity are not relevant. Religious points of view are expressed by a variety of types of religious organizations and, in addition, there are religious individuals who may or may not agree with the point of view their specific tradition espouses (Young, 2010: 333). Hindu communities, to a large extent, discourage young women and men from regular private interaction. This may have more to do with cultural tradition and caste. Social

division by caste is religiously ordained, and premarital sex is discouraged (Adamczyk & Hayes, 2012: 723).

The diverse perspectives on sexuality have a crucial influence on how the adolescent will respond to their reproductive health. Adolescent reproductive health has been given protection under the Convention on the Rights of the Child (CRC) until age 18 ((UNFPA, 2009: 13). These rights include among others: (1) the right to the highest attainable standard of health, including the right to reproductive health, (2) the right to impart and receive information and the right to education, including complete and correct information about sexual reproductive health, and (3) the right to confidentiality and privacy, including the right to obtain RH services without consent of a parent, spouse or guardian (UNFPA, 2009: 13). The ICPD of 1994 served as a springboard for the emergence of these adolescent reproductive rights. However, the structural arrangements of some societies produce an obstacle to adolescents enjoying these reproductive health rights. Some countries, especially low and middle income countries deprive adolescents of the right to access these services, using culture- and tradition-based arguments (CREA, 2005: 7).

## **2.8 Adolescent reproductive health policy in Nigeria**

Adolescent reproductive health policy was subsumed under the National Policy on the Health and Development of Adolescents and Young People in Nigeria (FMOH, 2007: 1). The National Adolescent Health Policy that was formulated in 1995 (FMOH, 1995) served as a precursor to the emergence of the present National Policy on the Health and Development of Adolescents and Young People in Nigeria. The policy goal is to promote the optimal health and development of adolescents and other young people in Nigeria. The policy describes adolescence as a period of transition from childhood to adulthood, while it defines adolescents as “individuals between ages of 10 and 24”. The broadening of this definition allows for capturing of the WHO’s definition of young people. The policy identified major areas of

adolescent health care and these include sexual behaviour, reproductive health, nutrition, accidents, drug abuse, career and employment. These major areas invariably became the focus of the policy, hence the intervention areas, among which is sexual and reproductive health and rights. The strategic thrusts and key interventions include among others, the provision of access to a comprehensive range of adolescent/youth-friendly information, as well as counselling and health care services, including school health services. The policy further emphasizes the mode of implementation as inter-sectoral and recommends that there should be a focus on building the capacity of health workers, social welfare officers, counsellors and other relevant staff to provide quality and friendly services to adolescents, and also effective school health services. If these measures are taken, says the policy, it will ensure the effective functioning of school health services and programmes in all parts of the country. The adolescent reproductive health policy targets are: (1) Reducing the incidence of unwanted pregnancies among adolescents by 50%, and (2) Halting the spread, and beginning the reverse of the spread of HIV/AIDS among young people by 2015. In the face of these disturbing statistics, achievement of these targets become unrealistic (Federal Ministry of Health, 2007: 12). The situation calls for urgent attention regarding factors that could constitute impediments to these targets, and the policy goal at large.

## **2.9 Adolescent reproductive health in Nigeria: State of the Art**

Adolescents in Nigeria make up 33.1% (60.4 million) of the total population (National Population Commission, 2014: 1). The current data on adolescent reproductive health outcomes put the adolescent fertility rate at 111 births per 1000. The percentage age of the 15-24 with comprehensive knowledge of HIV/AIDS stands at 22 for female, and 33 for male. The HIV prevalence ages 15-24 (2011) is 2.9 for female, and 1.1 for male (PRB, 2013: 2). These statistics, when compared to those of the developed countries, are disturbingly high. Adolescent fertility rates in some of the developed countries are as follows: United States – 26, Canada –

11, Britain – 30, France – 6, and Germany – 7, while the HIV prevalence rates are low; the highest being the United States – 0.3 for males. (PRB, 2013:3).

## **2.10 Adolescent reproductive health and decision-making**

It has been observed that as individuals transit from one stage to another, especially adolescents, they are likely to make decisions that could be dangerous or fatal, and that this could lead to an increase in preventable morbidity and mortality (Lim, Chahabra, Rosen & Andrew, 2012: 99). Decision-making is defined as “a process that chooses a preferred option or a course of action from among a set of alternatives on the basis of given criteria or strategies.” (Wang & Guenther, 2007: 73) People make decisions in their daily activities and encounters; some of these could be beneficial while others are less so, and might even be harmful. Adolescents are no exception. However, what differentiates adolescent decision-making from that of adults is age difference (Lim et al. 2012: 99). This difference in age is where the risk factor in their decision-making comes into play. Studies have shown the features associated with risky adolescent reproductive health behaviour. For instance, among English-speaking Caribbeans, approximately one-third of adolescents in this region have had sexual intercourse, with more than 75% of these reportedly having unprotected sex. The result of the Youth Risk Behaviour Survey in the United States indicates that almost half of students engage in sexual behaviour that leads to unintended pregnancies or sexually transmitted diseases (Chilton, Haas & Gosselin, 2014: 581). Data on Nigeria shows that about 1 in 5 of sexually active males had already engaged in sexual intercourse by the age of 15, and studies have further shown that risky sexual behaviours are associated with adolescents (Imaledo, Peter-Kio & Asuquo, 2012: 1). Early debut in sexual activities, multiple sex partners, low and inconsistent use of condoms, use of drugs and alcohol are examples of the risky sexual behaviour exhibited by Nigerian adolescents. Decision-making has been identified as a potential factor contributing to risky adolescent sexual behaviour (Wolff & Crockett, 2011: 1607). It is essential that the

adolescent's decision-making process is understood, especially by school health nurses before appropriate guidance can take place. Decision-making is a complex process, more especially in adolescence. There are basic issues that need to be addressed before the process can be fully understood, and these include: the distinguishing features of the adolescent decision-making process, the values and preferences of adolescents that lead to their decision-making, and the factors that result in risky adolescent decision-making. Different scholars have come up with a wide range of perspectives that could be employed to address these issues. First of all, each individual formulates for him or herself their own personal definition of what it means for a man or woman to attain the stage of adolescence (Gage, 1998: 154). This definition partly contributes to how each adolescent will make his or her own decisions. The neuroscience perspective indicates that changes take place in the structures and processes of the brain, especially in the cortical areas, specifically the frontal cortex, which sees important growth developments in the grey matter at 11 and 12 years in girls and boys respectively. The rarely used connections will be pruned down selectively, which brings about increased efficiency, and specialization in brain functions through some structural changes. There is an enhanced transmission of information through the neural connections that survive the pruning, with the pre-frontal cortex coordinating higher-order cognitive processes. There is also information integration from different regions of the brain as a result of synaptic overproduction, pruning and myelination. The development of skills such as impulse control arise as a result of this integration which ultimately leads to emotional maturity (Johnson, Blum, & Giedd, 2009: 216). Building on this, some scholars argue that the interaction between brain networks produces heightened risk taking in adolescence. The two networks are the cognitive control network – responsible for planned and reasoned actions such as decision-making, and the socio-emotional network – the seat of reward processing through social and emotional stimuli. (Steinberg, 2007: 55) However, the action of these networks in the adolescent brain still cannot adequately

explain adolescent decision-making. It only describes what could coordinate or drive the decision-making process. Still, this networks perspective does lay a good foundation for the development of the dual processing models of decision-making. Many other, similar networks perspectives further underscore the fact that adolescent decision-making actions stem from either the reasoned path or the social and affective path. Notable among these are: Gray's theory of brain functions and behaviour, cognitive-experiential self-theory, and fuzzy-trace theory. Gray's theory of brain function, just like the neuroscience perspective, emphasizes two neurological systems that work together in the human system, and these are the behavioural inhibiting system (BIS) and the behavioural approach system (BAS). They work in a concerted manner by modulating each other's activities. BIS becomes activated when there are aversive cues that would necessitate inhibition, negative affect, deliberation and reflection, while BAS operates on the platform of incentive cues linked with the approach behaviour, positive affect, and spontaneity (Gerrad, Gibbons, Houlihan, Stock & Pomery, 2008: 30). Cognitive-experiential self-theory advances the idea of an analytic system, and an experiential system which govern decision-making in adolescents. The analytic system is described as being "effortful, logical and deliberative" while the experiential is heuristic based, meaning that the system involves a mode that recognises impulsivity, intuition and image-based decision-making. Fuzzy-trace theory proposes two modes of reasoning premised on "verbatim", which is detailed, fine grained, and has elements of quantitative distinctions. The other, being "gist", entails representations that are crude, nominal and categorical. The "gist" exhibits the individual's knowledge, worldview, and culture. What differentiates the fuzzy-trace perspective from other dual processing theories of decision making is that it gives an upper hand to "gist". The import of this is that the social-emotional component of decision making is more developed than the detailed and systematic component. The theory assumes the early development of analytic competence while the development of intuitive reasoning is a function



of experience and maturity (Gerrad et al. 2008: 31). The latter form of reasoning becomes a dominant one as one becomes more exposed to the world, and pulls toward maturity. Some theories trace one single path to decision-making. The theories of reasoned action (TRA), and planned behaviour (TPB) undergird the above statement. They assume that decision-making can only happen through reasoned and careful consideration of alternatives and consequences. To TRA and TPB theories, intentions are seen as goals emerging subsequent upon careful deliberations. The weakness of these theories lies in the fact that they cannot fully explain why the risky decision-making is prevalent in adolescence. This gap is assumed to be bridged with the consideration of the prototype willingness model. The willingness model does not only assume that there is a reasoned and social emotional path, but only takes cognisance of the fact that that behavioural willingness also produces decision-making. The authors argue that risk prototypes and behavioural willingness modulate the decision-making of an adolescent by gauging the positive and negative images the risk prototypes attract, when they indulge in risky behaviour. The risk prototypes are those appropriate to the age of the adolescent who is engaging in the risky behaviour. The point of convergence with other dual processing models is that the reasoned process and the social reaction path can operate simultaneously. The willingness model portrays the expectancy value and vulnerability as antecedents to behaviour. The expectancy value lays much emphasis on the reward and gains accruable from engaging in a particular behaviour, while perceived vulnerability tends to discourage adolescents from taking a particular course of action. In the presence of peers, the adolescent may still want to take a risky action which they feel may lead to greater reward in spite of perceived vulnerability associated with such an action or behaviour, whether high or low. The authors further explain that risky behaviour is a function of the situation that encourages it, although such a situation may not demand it, and that such behaviour is not an outcome of reasoned decision-making. Rather, it is the willingness of adolescents that determines and produces such behaviour

(Gerrad et al, 2008: 33). In line with the above thoughts, it has been posited that guiding decision-making among adolescents would be more effective if their subjective probabilities (what adolescents believe), and their value (what adolescents want or prefer) are taken into consideration. In the context of the influence of social and affective factors such as values, poverty, gender inequity, early marriage, low educational attainment, limited employment opportunities, peer influence, intimacy, and life events on the adolescent, risky decision-making can penetrate through the above constructs (Reyna & Rivers, 2008:2; Gray, Azzopardi, Willersdoorf, Elise & Mick, 2011: 134).

### **2.11 School System in Nigeria**

Educational activities in Nigeria predate contemporary times. They started as systems in constellation as formal, non-formal and the formal forms of education were entrenched. Informal education was a means of transferring knowledge and values to the younger ones by adults through imitation and modelling. The non-formal expressed itself as the acquisition of vocational skills provided by the formal settings for those adults and younger members of the community who had no opportunity of accessing formal education. Formal education is one of the missionaries' legacies that impacted on the lives of the citizenry (Ifenkwe, 2013: 8). Formal education, according to this scholar, took off in 1862, and this heralded the establishment of primary education in Nigeria. Secondary education, also a product of missionaries' activities, started in 1859, while the colonial government started providing secondary education in 1909 (Mathew, 2013: 2). Nigeria's education system operates on a policy that stipulates a 6-3-3-4 format. This policy addressed a lot of crucial issues such as inequality in the access to education in different parts of the country, quality of resources, and girl-child education (Moja, 2000: 8). Etim (2014: 32) summarises the National Policy on Education's stand as follows: "Education is an instrument for national development; to this end, the formulation of ideas, their integration for national development and the interaction of persons and ideas are all aspects of education."

The policy blueprint indicates that a child will first spend 6 years in the primary school after attaining the age of 6, and another 3 years in junior secondary school, 3 more years in senior secondary school, and 4 years in tertiary education. The import of this is that no child will be younger than 12 years upon entering secondary school and is as such qualified to be regarded as an adolescent. The policy further indicates that a child will be expected to be rounding off his/her secondary education before reaching 18 years of age. The National Policy on Education forms the bedrock of the working definition of the adolescent in this study. Education comes under concurrent legislative list in the Nigerian Constitution (Nigerian Constitution, 1999: 147). The import of this is that all tiers of government have a joint responsibility in managing educational activities in Nigeria. Secondary schools are populated by adolescents who are mainly between 12 and 18 years of age. The essence of secondary education in Nigeria is the provision of better knowledge, aimed at developing a child in order for the individual to be able to adapt to the demands of the society and acquire an understanding of the world around him; this is lacking in primary education. Secondary education in Nigeria is divided into two phases: junior secondary and senior secondary phases. The junior phase is the initial phase, and its curriculum is pre-vocational and academic in scope. The subjects taught are classified as core, pre-vocational and non-prevocational subjects. The core subjects include: English Language, Mathematics, French, and a major Nigerian Language other than that of the Environment, basic science, social studies, citizenship education and basic technology. The pre-vocational subjects include: Agricultural Science, Fine Arts, Business Studies, Home Economics, Local Crafts, Computer Education and Music. The non-prevocational subjects are: Religious Knowledge, Physical and Health Education and Arabic (Mathew, 2013: 2). The second tier of secondary education lasts for 3 years, its scope is broader, and aims at broadening knowledge and skills acquired in the first tier. Students are required to offer a minimum of seven, and a maximum of eight subjects comprising the six core subjects such as English

Language, Mathematics, a major Nigerian Language, one science, an art, and a vocational subject. A student, upon completion of the course, is expected to pass with credits in at least five subjects in one or two sittings, including English Language and Mathematics, to be able to proceed to the tertiary level of the educational system (Mathew, 2013: 2).

### **2.12 School health service and adolescent reproductive health**

School health nursing is an integral aspect of school health services. School is the second-most influential institution in an adolescent's life, hence the need to provide health services that are adolescent friendly. The school health service is a form of integrated health delivery services and it is multidimensional in nature. It involves the collaboration of different health professionals, in collaboration with school personnel, towards rendering health care services that aim at promoting a friendly academic environment for the students, and others alike in the school system. The School Health Policies and Programs Study describes school health services as a "coordinated system that ensures a continuum of care from school to home to community health care provider and back." (Pourciau and Vallete, 2011: 586)

### **2.13 History of school health and school nursing**

The origin of the school health system is traceable to the outbreak of small pox in the United States around 1870 when the public health officials and other stakeholders realised that schools had an important role to play in the control of the epidemic, and this prompted them to target the school for children's vaccination against small pox. This development provided the platform for the vaccination of children before school enrolment (Pourciau & Vallete, 2011: 585). During this period, poor ventilation of the school environment was identified as a factor in the rapid spread of diseases among children. School inspection, subsequent upon these poor sanitary conditions, began as a means of stemming the tide of the spread of disease. The inspection entailed identifying the children with health challenges, and possibly getting them isolated during the incubation period. Other proactive health measures followed, such as

compulsory vision examination. The origin of school health is closely linked, and proximate to that of school health nursing. Lilian Wald played a prominent role in instituting school health, and school health nursing. Her contributions were truly remarkable, as she encouraged the emergence of school health nurses and improved health services that produced positive health and educational outcomes such as reducing the rate of absenteeism by 50% (Pourciau & Vallete, 2011: 586). Lina Rogers, who was hired at the behest of Lilian Wald, became an outstanding pioneer school nurse in America, and she contributed immensely to the treatment of the children and the monitoring of home environmental conditions in need of attention (Pourciau & Vallete, 2011: 586). The two personalities worked collaboratively to render comprehensive school nursing services at Henry Street Settlement in New York, thus making it the first city in the world to publicly fund school health services. The role of Lilian Wald and Lina Rogers made school health nursing a distinct area in community health nursing practice.

#### **2.14 School nursing and the role of school nurses**

School nursing has been defined as “a specialized practice of professional nursing that advances the well-being, academic success, and lifelong achievement and health of students.”

To that end, school nurses facilitate normal development and positive student response to interventions, promote health and safety, including a healthy environment, intervene in actual and potential health problems, provide case management services, and actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning, and it is an integral component of school health service” (National Association of School Nurses, 2011: 1). The role of school nurses are clearly defined by the National Association of School Nurses (2011: 2). These include facilitating normal development and positive student response to intervention. The school nurse is expected to design interventions and care, based on his or her knowledge and understanding of human development, that will meet the health needs and challenges of the students. The expectations include the use of

nursing processes to design inputs and care. Leadership in promoting health and safety, including the building of a healthy environment, is one of the expectations of the school nurse. In discharging this role, her activities should encompass educating students and school personnel on the need to maintain a healthy environment, improve sanitary conditions, ensure that the students have their immunisations regularly, manage communicable diseases, and ensure safety by guiding against school violence and bullying. In addition to the role stated above, they provide quality health care and intervene in actual and potential health problems. This requires the school nurses to carry out needs assessments so that they know how to prioritize and make effective interventions. The cooperation of the students and school professionals is essential to achieving this. The issues and needs should be properly defined. The physical, social and emotional health needs of all concerned are expected to be catered for in within this vision, and by this programme. School nurses make clinical judgments about the necessity of addressing the individual needs of the students, and exercise medical judgments in guiding the healthcare needs of the school population. NASN (2011: 2) further reiterates the role of school nurses and state that these include enhancing student and family capacity for adaptation, self-management and learning. This requires active collaboration with other health professionals, school professionals, and family members. The necessary information is provided to students and family so they can use it to make informed decisions about their health care. School nurses are expected to furnish students and family with information on the availability of community resources that they can effectively use for their health care benefit. All the above activities are geared toward health promotion, prevention of sexually transmitted infections, guidance on prevention of adolescent pregnancy and parenting (Magalnick & Mazyck, 2008: 1052).

## 2.15 School health service in Nigeria

The school health service is an integral component of the school health programme. The World Health Organization (1996) defines the school health programme as “a combination of services ensuring the physical, mental and social well-being of learners so as to maximize their learning capabilities”. The WHO Experts’ committee on school programmes states that public health, education, social and economic development can be advanced through school health programmes, and this thrust forms the basis of the global expansion of school health programmes. In establishing the school health programme in Nigeria, a policy was formulated to guide the direction and action needed in the schools. The scope of the school health programme, arising from the policy document (Federal Ministry of Education, 2006a: 8) includes the following:

- 
- i) Healthful school environment
  - ii) School feeding services
  - iii) Skills-based health education
  - iv) School health service
  - v) School-home and community relationship

The policy stipulates that the school health service intends to utilise both preventive and curative dimensions of health to enhance the health status of the school population, especially students, toward achieving the maximum health possible while in the pursuit of their education. The policy further emphasizes that it will be implemented through a multidisciplinary approach that is the realisation of the aim of school health service. Further, it will require the cooperation of various health professionals such as school nurses, medical doctors, health educators, environmental health officers, school guidance counsellors, community health workers, dieticians, nutritionists, school teachers and social workers (FMOE, 2006a: 12). There is a dearth of literature on the implementation of school health services, to which school nursing is

linked. However, the evidence provided by Ogunfowokan (2010: 3) shows that the school health programme is poorly implemented in Nigeria in spite of the policy that affirms its establishment. The findings show that the school nurses who engage in the programme come from the Ministry of Health or Comprehensive Health Centres. The findings further reveal that they have not been formally trained to function as school nurses, and that a feeling of dissatisfaction was rife among them. In another study by Akpabio (2010: 17), there is low coverage of the school health programme, while the scope of school nursing practice is confined to the treatment of minor ailments and injuries. The study reveals, too, that there is a lack of adequate facilities, which results in nurses' feelings of dissatisfaction.

### **2.16 School nursing and adolescent reproductive health**

Decision-making skills are among the most needed skills by adolescents in addressing reproductive health issues and challenges (Birdthistle & Vince Whitman, 1997: 40). Various studies on school nurses' role in different contexts have established the essence of school nursing. School nursing practice across countries has shown that adolescent reproductive health is one of its key concerns. The World Health Organization (2009) indicates that in many parts of the world, information about sexual health has not been properly understood. This raises a challenge of getting adolescents to have a grasp of the information needed for their decisions about reproductive health. It has been posited that adolescents who have the perception of being guided by health professionals appear to make better decisions in their reproductive health (Oladipupo-Okorie & Viatonu, 2014: 231). Sound sexual health can be enhanced by the provision of medically accurate, developmentally appropriate and evidence-based sexual health education aimed at equipping adolescents with the skills and resources that help them to make informed and responsible decisions (NASN, 2012: 1). Situating the essence of school nurses further, Gabzdyl (2010: 267) in a study on contraceptive care of adolescents reveals that school nurses who are skilled in working with adolescents provide services that are



comprehensive and aimed at improving their reproductive health outcome. School nurses in Queensland High Schools are found to be providing sexual and reproductive health advice to adolescents and this seems to be influencing their decision-making capacity (Smith & Stepanov, 2014: 1). In line with the above, Farrag (2014: 49) has identified sexual and reproductive health education as one of the focus areas of school nurses because of their vast health knowledge. Aligning with the previous position, Onyeka, Miettola, Ilika & Vaskilampi (2011: 109) submit that school nurses are important in addressing sexual and reproductive health issues of adolescent students. The authors further assert that school nurses who are trained are capable of offering these services in order to complement what the students have been taught in the classrooms. They argue that this will create a platform that will enable students to have a confidential interaction with school nurses. In summary, the existing literature supports the fact that school nurses have a role to play in the sexual and reproductive health of school adolescents. However, the various study findings show that school nurses' activities in reproductive health in secondary schools are limited to advice on the use of contraceptives, managing teen pregnancy, and sexual health education among secondary school adolescents (Hayter & Owen, 2012:433; Denny, Robinson, Lawler & Bagshaw, 2012: e14; Parasuraman & Shi, 2014: 1). The role of nurses in guiding adolescents in their decision-making about reproductive health is not well developed or researched in the bulk of the literature. It has been observed that many school health programmes are information-based and focus on knowledge about the reproductive system and its functions, and symptoms of sexually transmitted infections (Birdthistle & Vince-Whitman, 1997: 29). The authors argue that such information is not adequate to equip adolescents with the skills they require to make decisions on their sexual and reproductive health. They further observe that the adolescent decision-making process has been greatly enhanced through the use of theories concerned with

behaviour change. The implication here is that school nurses must be well equipped before they can effectively guide adolescents in their decision making about reproductive health.

### **2.17 School health nurses and guidance**

Guidance is the act of assisting individuals to achieve their social and personal aspirations by making them appreciate, accept and use their potentials relating to those aspirations (UNESCO, 2000: 73). Guidance, in most cases, entails helping adolescents in those areas in which they lack adequate capacity to make good decisions that affect their lives. Guidance activities are part of a process that involves sequenced actions undertaken with the intent of producing the desired outcome. Guidance aims at understanding one's strengths, limits and resources, achieving maximum development of an individual, and addressing various challenges confronting an individual. The act of guiding uses certain information about an individual, and then harmonizes it with specific knowledge based on expectations of the person (Borgen, 2002: 332). Decision-making in reproductive health is one of the challenges facing adolescents as a group; for this, guidance is required. Shrivastava (2003: 30) argues that past experiences form the basis of guidance, but that for adolescents, whose experiences are limited in scope and variety, any decision made usually arises from limited options or alternatives. These limited alternatives, which could inform their decision, may not be productive, as later in life they may come to realise the shortcomings inherent in the choices they have opted for. The following steps, according to MCGCP (2014: 9), are involved in guidance:

- Needs assessment

This has to do with the priorities of students and the identification of areas where they face challenges. The identification of these areas has to be in the context of students' perception and society. There is a need to stem the rising wave of adolescent mortality resulting from their poor decisions about their reproductive health. There is policy

support (FMOE, 2006a: 8) for this cause, which invariably requires the cooperation of all the stakeholders so that they may contribute their efforts toward the cause. School health nurses, being among the frontline health care providers, are expected to prepare, and to rise to this challenge. This preparation and this challenge constitutes the basis for this study.

- Develop an action plan

A plan for guidance activities should be formulated. This requires that the school health nurses access detailed information on adolescent experiences on decision-making about reproductive health. The objectives of the guidance process, and the logistics for their execution have to be put in place. In addition, the school nurses should develop content for the guidance programme which focuses on the adolescent decision-making process in reproductive health. The programme has to be articulated in modules and units, and the number of sessions has to be determined.

- Select group members

The individuals for whom guidance is targeted will be selected. In selecting the group members, the person offering the guidance has to be conscious of group dynamics which may make or mar the outcome of the guidance activities. In selecting the secondary school adolescents for this activity, the early, middle and late adolescent students have to be grouped separately, as the mixing of groups could affect the outcome of the guidance. In Nigerian secondary schools, the student groups have their respective sub-cultures. The students in the Junior Secondary arm always defer to students in the Senior Secondary arm on many issues as a mark of respect. Respect for seniors is a strong value in Nigerian culture, and this has been institutionalised in secondary schools. Against this backdrop, and coupled with the fact that their experiences on reproductive health issues differ, school health nurses should factor in

all these dynamics while selecting group members for guidance on decisions about reproductive health.

- Obtain informed consent

The informed consent of the concerned students should be obtained as this will serve as proof that the students were not coerced, and that their privacy was not violated. School health nurses should inform the school head about their intention to carry out guidance on adolescent decision-making. The assent of the adolescents, after the rationale has been explained, should be sought before the guidance sessions commence.

- Conduct sessions

These have to do with guidance proper. The content of the subject matter will be explored using any one of, or a combination of the following techniques: group discussion, problem solving, and role play. School health nurses should conduct sessions with adolescents on their decision-making in reproductive health, moving from one unit to another until all aspects have been exhaustively explored.

- Conduct evaluation

Evaluation entails investigating whether the set objectives have been met. The school health nurses should conduct evaluation in order to determine the effectiveness of their guidance activities, which could be through post-test, asking them to demonstrate the knowledge through role play while the nurses watch them in action, and also by asking them questions.

Certain principles govern the act of guiding people. These principles help in giving focus to the guidance activities by espousing the nature of individuals or clients at the centre of the guidance activities. The principles will enable school health nurses to provide focused and adolescent-centred guidance in their decision-making on reproductive health. Shrivastava (2003: 30) outlines some principles that direct guidance as follows:

- Holistic development of individual

The implication of this principle for school health nurses is that adolescents should be seen as bio-psycho-social beings i.e. a product of physical, social and mental forces. A combination of all these factors influences the development of adolescent as an individual (SAHM, 2014: 491)

- Recognition of individual difference and dignity

Individual differences are a reflection of an individual's uniqueness. Adolescents should be regarded as being different from either a child or an adult, each with their own personality. There should not be any basis for comparison as they are distinct individuals. School health nurses should respond to their unique needs. They should be treated with admiration that will promote their self-esteem. Adolescents should be accorded the right to control their health and body, including sexual reproductive freedom to make responsible choices (SAHM, 2014: 491). The import of this is that school health nurses should assist adolescents in achieving this right by guiding them on their decisions toward making responsible choices.

- Acceptance of individual needs

Individual needs should determine the necessity and kind of guidance that will be given. School health nurses should offer their guidance on the basis of adolescent reproductive needs which have to do with making right choices. They should respect adolescents' rights on these needs, and be accorded due respect and dignity.

- The individual needs a continuous guiding process from early childhood throughout adulthood.

Guidance is a continuous process, as individuals will continue to require it in the course of their lives. Guidance is embedded in the developmental process. It is required at every stage of human development and helps in making adjustments to the

environmental demands which impact on individuals' social and economic lives, including their health. Guidance on reproductive health should start early in life, especially at primary school, and continue through secondary school, to the point where individuals can make good decisions devoid of risks to health, and with minimal influence of peers, and other influences that can impact negatively on their reproductive health.

- Guidance involves using skills to communicate, love, regard, and respect for others.

The people carrying out guidance should possess communication skills that will be needed to effectively achieve the ends of the programmes. School health nurses' knowledge and skills in communication should be enhanced. The skills needed to communicate with adolescents with respect to their needs, emotions, feelings and perceptions should be well developed by school health nurses before they can successfully guide adolescents in their decision-making about reproductive health.

There is a dearth of empirical studies on how school health nurses guide adolescents in making decisions about their reproductive health, especially in Nigeria. However, the findings of a study on guidance provided by school nurses, on internet addiction show that school nurses' abilities should be enhanced through training programmes (Oh, 2005: 405). In another study examining the effectiveness of health education, teachers and school nurses teaching prevention of HIV/ sexually transmitted infections, and knowledge and skills in this area, the student participants' responses reveal those that were taught by school nurses were able to report a change in their intentions to use condoms, and also enjoyed greater success in maintaining their cognitive perspectives such as self-efficacy, condom-related beliefs, and peer-behaviour beliefs. On the other hand, those taught by health education teachers only reported having only the knowledge of the importance of the use of condom (Borawski, Tufts, Trapl & Hayman, 2015: 193). The import of the outcome of this study is that school nurses

constitute a good human resource in the area of guiding adolescents on their reproductive health, and may even perform better than health educators in an enabling environment.

### **2.18 School health nurses' knowledge and academic preparation**

School health nurses are expected to have an elaborate educational preparation, as school nursing is one of the specialised areas of nursing. Besides, their role expectations and job specifications indicate that they should have good training and education, especially, in the area of adolescent care and guidance in life skills. These are responsibilities that are complex in nature, which basic nursing education and training cannot fully address. School nurses' educational preparations are diverse in nature and there are various entry points into the speciality areas, which is a function of the fragmented nature of nursing education (Denehy, 2007: 191). This lack of unified educational preparation has created some degree of permissiveness in terms of the qualifications of the practitioners of school nursing. The National Association for School Nurses, having recognised the complexity of school nurses' role, reached a position that requires anyone who wishes to practise as a school nurse to be prepared at a baccalaureate degree level, which may be supplemented with some training or education leading to their being licenced by a suitable State board (Magalnick & Mazyck, 2008: 1054). In the United States, the educational preparation of school nurses ranges from licence practice nurse level to Master's or Doctoral levels (Denehy, 2007: 191). The import of these varied preparations is that school health nurses demonstrate different skills and knowledge in school nursing practice and this may create different perceptions of the nature of school nursing and role expectations, and attendant competence among school health nurses on the one hand, and the members of the public who are the consumers of their services on the other. In the United Kingdom, what school health nurses possess is registered nurse licensure. They are expected to work toward finishing a post-graduate degree as this will enable them to achieve the status of specialist community public health nurse, which is regarded as a point where

school nurses can practice professionally (Royal College of Nursing, 2014: 5). In Nigeria, the school health policy does not emphasize the additional qualifications required to practise as a school health nurse besides registered nurse licensure, which is achieved after a three-year basic nursing programme (Federal Ministry of Education, 2006a: 12). In a study on the opinions of nurses working in the school health service, it was reported that the nurses interviewed expressed their wish to be trained as school health nurses. The implication of this is that nurses working in the school system in Nigeria were not specifically trained as school health nurses (Ogunfowokan, 2010: 31).

## **2.2 SUMMARY**

An overview of the literature was conducted on the concept of adolescence, its development, adolescent theories, and relatedness among those theories. This overview also covered decision-making generally, and further delineated adolescent decision-making processes and models. School health services, school nursing and their relationship to adolescent decision-making about reproductive health were examined. Guidance and its processes, and academic preparation of school health nurses were included in the review activities. The review linked all the concepts to one another, and their respective strands were interwoven with one another in order to present a holistic picture of the study focus.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

This section brings to the fore the research methodology, methods, and processes involved in this intervention research study. Research methodology is a spectrum of activities that covers the whole of the process of research. It involves the design and methods used in carrying out research (Schwandt, 2001: 158). Methods constitute the techniques, tools, and they are procedural in nature (Schwandt, 2001:158). Simply put, they are the means of achieving the research goals. The two are related as methodology will determine methods which will produce knowledge. The choice of methods is a function of objectives, research questions and design, and all these in turn are shaped by methodology (Carter & Little, 2007: 1316). Studies abound that methodologies are replete with epistemic elements, hence the influence of epistemology in the method of research appears incontrovertible (Carter & Little, 2007: 1316).

### **3.2 QUALITATIVE RESEARCH APPROACH**

The Qualitative research approach was used in collecting and analysing data toward addressing objectives one, two, three and four of this study. The outcome of these activities was used to develop an appropriate intervention programme for school health nurses on guiding adolescents in their decision-making on reproductive health. The qualitative approach is one of the dominant methodological approaches in research endeavours. The choice of the research approach is a function of the purpose the research is intended to serve. The qualitative approach makes use of words rather than numbers as is evident in quantitative research, and it is also associated with the use of open-ended questions (Creswell, 2009: 3).

Qualitative research is a means of discovering knowledge through the exploration and understanding the meaning individuals or groups attach to phenomena. It also goes further to help the researcher in gaining understanding of the processes, and experiences of people in relation to context, emotions, and culture (Creswell, 2009: 4). Qualitative research is defined

as “a set of interpretive, material practices that make the world visible” (Brown, 2010: 229). These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to self. The definition covers a wide range of research activities that promote interactions between the researcher and the participants. It further indicates that the research activities are context-sensitive. Atieno (2009:1 3) delineates the assumptions of qualitative design as follows:

- Qualitative research emphasizes process, rather than outcome.
- Meaning attached to the phenomenon is more important in qualitative research.
- The primary instrument is qualitative researcher as s/he makes use of his/her knowledge to interact with participants to obtain information. The researcher has access into their schema of mind.
- It involves going to the sites, field, and meeting them in their contexts to observe their behaviour in its natural setting.
- Qualitative research is descriptive in nature as words or representations are used to capture the meaning and the understanding gained during the interview.
- Qualitative research is not about testing theories; rather, it enables the researchers to make abstractions, and generate concepts and theories from the evidence gathered from people.

### **Criticisms of Qualitative approach**

The criticism against qualitative research entails its inability to generalize its findings to the larger population due to the small proportion of participants. The outcome of the study, in most cases, is value-laden. Further criticisms show that qualitative research has some credibility challenges as the validity of the study is not as readily accepted as that of a quantitative one. The researchers operating within the qualitative tradition strongly contested their (critics) position by justifying credibility through the process of scientific rigor (Yilmaz,

2013: 321). It has been argued that the qualitative approach is quite useful and productive in a study that entails some intervention against the backdrop of different skills, abilities, goals and interests of the people involved, in addition to the fact that the approach creates understanding of the essence of the programme. The qualitative approach further helps the participants in making their point of view known by capturing this in their own words (Yilmaz, 2013: 315).

### **3.3 RESEARCH DESIGN**

Intervention design and development (Rothman & Thomas, 2013) constituted the core of the study design. Intervention design and development is a form of intervention research. Fraser and Galinsky (2010: 459) define intervention research as “the systematic study of purposive change strategies characterised by both design and development of interventions.” The import of this definition is that the current means of achieving an end, an existing mode of performance is deficient in some aspects, thereby leading to poor outcome or expectations. Intervention research, like other forms of research, adopts a scientific approach in achieving its aims, hence the systematic component of its description.

#### **3.3.1 FACETS OF INTERVENTION RESEARCH**

Intervention research has three facets which are: knowledge development (KD), knowledge utilisation (KU), and design and development (D&D). The abbreviations will, henceforth, be used in relating the three facets. Knowledge development constitutes the knowledge base of intervention. The important areas in knowledge development include learning more about the relevant target behaviour of potential clients and client systems. This focuses on the problematic situation of the clients, and the challenges confronting them at personal, group or organisational levels. The second important area is relevant intervention behaviour, which implies the innovation or practical solution to the problems identified by the clients. The relevant behavioural, social, contextual, and environmental conditions constitute the third leg of the tripod. This connotes environmental influences on the identified problems. Put

differently, this means the influence of culture, value system, and attitudes of a given context on the definition and its related intervention. The research methodology involved in knowledge development consists mainly of the research methods and techniques associated with conventional behavioural and the social science method. Knowledge development may be conducted separately or combined with other facets, meaning that KD can be conducted as an independent activity separate from any KU or D&D activity. Second, KD can be purposively linked to KU and D&D while the third form is when KD is directly linked to or subsumed into D&D activity. The second facet is knowledge utilisation (KU). This entails the processes involved in demonstrating the usability of the research knowledge. It involves appraisal of knowledge from the primary research through the use of empirical research methods such as meta-analysis, systematic analysis, and integrative literature review. The KU processes encompass the selection, retrieval, appraisal, codification, and synthesis of relevant knowledge, formulation of generalisations, stipulating practice guidelines, and making them operational (Rothman & Thomas, 2013: 9). Design and Development (D&D) is the third facet. D&D is a systematic means of producing an intervention technology. The processes are embedded in research endeavours. The main purpose of D&D is not to generalize the knowledge gained through the research procedures, but to produce a technology or an intervention that would effect a change in the identified problematic situation.

### **3.3.2 DESCRIPTION OF THOMAS AND ROTHMAN'S INTERVENTION DESIGN AND DEVELOPMENT MODEL**

The Intervention Design and Development model of Rothman and Thomas (2013) is a synthesis of ideas from the five related traditions found useful in conducting intervention research. These are as follows: the experimental social innovation of Fairweather (1967), using quasi-experimental designs to evaluate the effects of social programs; the social research and development approaches of Rothman (1980), which adopted the developmental engineering

model of physical sciences; the developmental research of Thomas (1984), which utilised applied research and empirical practice models; the model development research of Paine, Bellamy, and Wilcox (1984), emphasizing moving from innovation to standard practice; and the behavioural community research of Fawcett (1990), which had its basis in behavioural analysis and community psychology (Rothman & Thomas, 1994; 2013: 6). These approaches are different in terms of orientation, but they share common features that could help in guiding researchers and practitioners toward developing interventions that may help in addressing some challenging situations. Thus, the Intervention Design and Development model of Rothman and Thomas is an outgrowth of the synergy of the aforementioned research efforts. They were the first to propose an integrated model of intervention research in social work. Rothman and Thomas (2013: 26) outline six phases of the model that could be used to develop an intervention programme. The phases are: (1) problem analysis and project planning (2) information gathering and synthesis (3) design (4) early development and pilot testing (5) evaluation and advanced development and (6) dissemination. The operations in the phases overlap one another. Put differently, they are iterative in the mode of progression.

### **3.3.2.1 Phase one: Problem analysis and project planning**

This phase is similar to carrying out situational analysis or needs assessment, which is a preliminary activity aimed at defining the problems and needs before the intervention activity. The researcher collects data and necessary information using different types of methods in order to appraise the situation before setting up an intervention (Fawcett, Suarez-Balcazar, Balcazar, White, Paine & Blanchard, 2013: 45). The activities involved are as follows:

- Identifying and involving clients
- Gaining entry and cooperation from settings
- Identifying concerns of the population
- Analysing identified problems

- Setting goals and objectives

### **3.3.2.2 Phase two: Information gathering and synthesis**

This phase entails knowing what others have done, in respect of the issue or the problem that requires an intervention. The knowledge of what others have done is achieved through choosing types of knowledge considered to be pertinent, and also by merging different sources of information (Fawcett et al. 2013: 32). The significant aspects of this phase include:

- Using existing information sources
- Studying natural examples
- Identifying functional elements of successful programmes

### **3.3.2.3 Phase three: Design**

This embraces the means of observing events and outcome which occur in the process of implementing an intervention programme. Put differently, the evaluation strategies are put in place during this phase. The elements that constitute an intervention will be specified (Fawcett et al. 2013: 34). Two operations associated with this phase are:

- Designing an observational system
- Specifying procedural elements

### **3.3.2.4 Phase four: Early development and pilot testing**

This phase witnesses the evolution of primitive design. The prototype or a preliminary intervention becomes developed through a number of activities:

- Developing a prototype or preliminary intervention
- Conducting a pilot test
- Applying design criteria to the preliminary intervention concept

### 3.3.2.5 Phase five: Evaluation and advanced development

This phase entails the use of research methods to examine the change programme as to its effectiveness. This phase is more sophisticated than pilot testing as it uses methods that ensure precision of the programme impact (Fawcett et al. 2013: 37). The activities involved are as follows:

- Selecting an experimental design
- Collecting and analysing data
- Replicating the intervention under field conditions
- Refining the intervention

### 3.3.2.6 Phase six: Dissemination

This is the last phase and encompasses communicating the outcome of refined intervention to the end users for use in their respective areas. The operations involved are as follows:

- Preparing the product for dissemination
- Identifying potential markets for the intervention
- Creating a demand for the intervention
- Encouraging appropriate adaptation
- Providing technical support for adopters

**Table 3.1: Phases of the Intervention Design and Development model (Rothman & Thomas, 1994)**

<b>Phase</b>	<b>Activities/Operations</b>
Phase 1: Problem analysis and project planning	Identifying and involving clients  Gaining entry and cooperation from settings

	<p>Identify the problems of the population</p> <p>Analysing the identified problems</p> <p>Setting goals and objectives</p>
<p>Phase 2: Information gathering and synthesis</p>	<p>Using existing information sources</p> <p>Studying natural examples</p> <p>Identifying functional elements of successful models</p>
<p>Phase 3: Design</p>	<p>Designing an observational system</p> <p>Specifying procedural elements of the intervention</p>
<p>Phase 4: Early development and pilot testing</p>	<p>Developing a prototype or preliminary intervention</p> <p>Conducting a pilot test</p> <p>Applying design criteria to the preliminary intervention concept</p>
<p>Phase 5: Evaluation and advanced development</p>	<p>Selecting an experimental design</p> <p>Collecting and analysing data</p> <p>Replicating the intervention under field conditions; refining the intervention</p>
<p>Phase 6: Dissemination</p>	<p>Preparing the product for dissemination</p> <p>Identifying potential markets for the intervention</p> <p>Creating a demand for the intervention</p>



	Encouraging appropriate adaptation; providing technical support for adopters
--	--

The Intervention Design and Development model guided the process of carrying out the study. The phases, for the purpose of this study, were limited to the first four. The implication of this is that the study terminated at the development of the intervention programme and pilot testing. This modified version of Intervention Design and Development was used to develop prototype/preliminary intervention programme that will assist school health nurses in guiding adolescents in decision-making about their own reproductive health in Ijebu Ode local government area of Nigeria.

### **3.3.3 MODIFIED PHASES OF INTERVENTION DESIGN AND DEVELOPMENT OF ROTHMAN AND THOMAS**

The modified Intervention Design and Development model of Rothman and Thomas (2013) was used in addressing the research objectives, which culminated in identifying the problems and needs that necessitated the development of the intervention programme. Four of the phases of the model were employed to achieve this focus.

#### **3.3.3.1 PHASE 1: PROBLEM ANALYSIS AND PROJECT PLANNING**

The operations in this phase include: identifying and involving clients, gaining entry and cooperation from settings, identifying concerns of the population, analysing identified problems, setting goals and objectives (Fawcett et al, 2013: 27).

**3.3.3.1.1 Identifying and Involving Clients:** The school environment constituted the study context. Construction of realities is context-dependent, which implies that the meaning of observation is understood against the backdrop of its circumstances or the environment (LoBiondo-Wood & Haber, 2010: 88). Simply put, researchers must be conscious of and

sensitive to the context of the research, as this will enable them to become acquainted with the nuances, emotions and experiences of the participants. The study participants were identified in relation to the context of the study. School health nurses, school adolescents, and school teachers were identified as clients. The school health coordinator to whom the school nurses are responsible was also involved in the study. They, altogether, constituted the study population. Study population is described as an aggregate of individuals or objects that meet the study criteria (Safman & Sobal, 2004: 9). The study focused on the role of school health nurses toward guiding adolescents in their decisions about reproductive health, and how they could be assisted to discharge the role effectively, thereby making school health nurses the prime participants. Others were involved as a result of the school health nurses' role relationship with them. Adolescent students in secondary schools are the direct beneficiaries of the school health nurses' services. Their decision-making in reproductive health matters requires guidance from school nurses in order to engender positive reproductive outcomes. The teachers are the custodians of the secondary school environment, hence their involvement in the study.

#### **3.3.3.1.2 Gaining entry and cooperation from setting**

##### ***Research Setting***

The research setting was secondary school environment in Ijebu Ode Local Government Area of Ogun State. Presently, there are ten secondary schools in the local government area. Some are either exclusively for males or females, while some are co-educational in nature. The schools are located in both the urban and rural segments of the Area. The rural segment has two, while the urban part has eight secondary schools. The urban communities are found to accommodate at least 20,000 people, while less than 25% engaged in agricultural activities (Babalola, 2012: 86). Ijebu Ode local government area is one of the twenty Local Government Areas that constitute Ogun State, which is one of thirty-six states that make up the Nigerian

nation. These States are further subdivided into 774 Local Government Areas (NMDG, 2004). The country is situated on the West Coast of Africa. It is composed of more than 250 ethnic nationalities, and the dominant ones are Hausa and Fulani (29%), Yoruba (21%), Igbo (18%), Ijaw (10%), Kanuri (4%), Ibibio (3.5%) and Tiv (2.5%) [NNPC, 2010]. Nigeria's population presently stands at 173.6 million (2013 est.), and is classified as one of the Lower Middle Income Countries (World Bank, 2014). Ijebu Ode local government Area came into being in February, 1976, and the headquarters, Ijebu Ode, is located 110km by road, North East Lagos, and within 100km of the Atlantic Ocean in the Eastern part of Ogun State (Olayiwola, 2013: 8). Ogun State is one of the States that makes up the South-West geo-political zone. Altogether, there are six geopolitical zones in Nigeria. Others are North-West, North-East, North-Central, South-East and South-South geopolitical zones (Kale, 2012: 4). The local government area is predominantly inhabited by the Ijebu extraction of the main Yoruba. Other Yoruba and non-Yoruba speaking people are resident in the area. Ijebu Ode Local Government Area is the flagship of the Local Government Areas in the Ijebu community. The present population, arguably, stands at 222,653 (NPC, 2006). The preference for Ijebu-Ode local government as the choice of the study setting was borne out of the fact that statistics reveal that the mean age of sexual debut is 13.4 years, and the prevalent teenage pregnancy rate is 22.9% (Animasaun, Oduwole & Aryeety, 2014: 3; Amoran, 2012: 1).



**Fig 3.1 Map of Ijebu Ode Local Government Area of Nigeria**

### 3.3.3.1.3 Identifying the problems of the population

#### *Study participants*

In identifying the concerns of the population, the study participants were first identified in order to identify those that would participate in the study. The study participants were school health nurses, school adolescents, school teachers, and a school health coordinator. The total number of school health nurses working in these schools is nine. Each of the schools, with the exception of one of the rural schools, has a school health nurse. In effect, eight nurses were selected for the research, one selected from one of the two schools in the rural part of the local government area while the remaining seven were selected from seven of the eight schools in the urban segment of the local government area. The remaining one did not meet the selection criteria. The selection of the schools and study participants was made through the purposive sampling technique.

## Sampling

Sampling is a means of taking a population subset on the grounds that they are capable of providing the information needed in addressing the research problem (Oppong, 2013: 203). Purposive sampling is a form of qualitative sampling which requires that the researcher uses his or her discretion in selecting the participants based on the criteria subjectively determined by the researcher, and it does not take into account the representativeness of the study sample (Abrams, 2010: 540). Qualitative sampling is shaped by the prevailing epistemological and disciplinary circumstances. The focus of the qualitative sampling is the theoretical depth as it aligns with the purpose and goals of the study; its size cannot be predetermined and the information from previous observations can determine its choices (Abrams, 2010: 541). Eight schools were selected for the study. Seven were from urban area while the remaining one was from a rural area. The sample comprised eight school health nurses, seven from the urban, and one from one of two rural secondary schools. Five teachers were purposively selected from five of the schools, four from the urban, and one from the rural while a total of thirty-six adolescents were selected for the study, twenty nine from four urban secondary schools, and seven students from one of the rural schools.

**Table 3.2: Study participants**

Participant description	Number	Sex
School health nurse	8	7F, 1M
Secondary adolescent	36	25F, 11M
School teacher	5	4F, 1M
School health coordinator	1	1F

The straightforward research questions aim at addressing challenges in local practice and applied fields and require a small number of study participants (Baker & Edwards, 2012: 21). The participants who met the inclusion criteria were selected for the study. Inclusion criteria

constitute predefined features or attributes the researcher uses to identify and select the participants from the target population for the study (Salkind, 2010: 589). Inclusion criteria and exclusion criteria constitute eligibility/selection criteria. The selection criteria are used to determine those that will be selected from among the target population for a research study. Inclusion criteria allow for the proper selection which invariably will ensure scientific rigour, and the validity of the study. The selection of inclusion criteria was guided by careful and extensive literature review. The criteria for the inclusion of the school health nurses took into account their occupational experience, which was stipulated at not less than two years. The researcher was convinced that the period was long enough to enable the school health nurses to have a good grasp of their role toward school adolescents and their reproductive health. The teachers selected for participation must have spent, as well, no less than two years in the profession, as this would afford them the opportunity to be familiar with the role expectations of the school health nurses, especially in respect of adolescent reproductive health, and the awareness of the school health nurses' relationship with school adolescents and others in the school environment. The adolescent participants whose age range was between 12 and 17 years were selected in line with the Nigeria National Policy on Education. Those who had been interacting or consulting school health nurses on reproductive health were selected from all the levels in both junior and senior arms of the secondary schools involved in the study, i.e. from junior secondary one through senior secondary three. The school health coordinator involved in the study is the one to whom the school health nurses are responsible. She oversees and supervises the activities of the school health nurses and is responsible for the redeployment of school health nurses in Ogun State.

## ***Data Collection Tools***

Data collection is a means of obtaining information from participants for research in a systematic way (Clamp, Gough & Land, 2005: 196). The information required from the study participants was obtained through semi-structured interviews and focus groups.

### **Interview Guide**

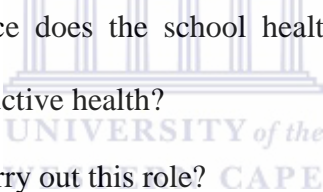
Interview guide is a list of topics or areas that a researcher covers in the semi-structured interview. It is often prepared in advance of the interview activity, and constructed in such a way as to allow for flexibility and fluidity in the topics and areas to be covered (Lewis-Beck, Bryman & Liao, 2003: 519). The construction of the interview guide derives its strength from the research questions that guide the study. The interview guide is directed toward covering the areas that can address the research questions (Lewis-Beck, Bryman & Liao, 2003: 519). In constructing questions for interviews, Turner (2010: 58) argues that some elements have to be evident: (1) The wording should be open ended. (2) Questions should be as neutral as possible. (3) Questions should be asked one at a time. (4) Questions should be worded clearly. Terms or jargon particular to the study area should be glossed, and the questions should reflect a knowledge of and sensitivity to the respondent's culture. (5) Be careful of asking "why" questions as these may produce simplified rather than descriptive and exploratory narrative.

The interview guide allows the interviewer to make some instant decisions about the content and sequence of the interview as it progresses. The guide was developed to cover the important aspects of the research questions. The questions in it related very aptly to the main research questions. Separate interview guides were prepared for each set of study participants. The interview guide was used in directing the interview with the school health nurses, who were the main participants for the interview. The study was focused on them, how they perform their

role in the school environment, and how they guide adolescents in their decision-making about reproductive health. Questions in this interview guide were as follows:

- How did you become a school health nurse, and what are your role in the secondary school?
- How do adolescents make their decisions about reproductive health?
- What are your experiences on guiding adolescents in their decision-making on their reproductive health?
- What challenges are you facing in carrying out this role?

The school teachers' and head teachers' interview was conducted using an interview guide designed for them. The purpose was to ensure that the interview remained within the confines of the issue under scrutiny. The interview guide took the following form:

- 
- What kind of guidance does the school health nurse offer school adolescents regarding their reproductive health?
  - How does he or she carry out this role?
  - What challenges is the school health nurse facing in performing his/her role?

Interview was conducted with school health coordinator because of her role in the implementation of school health services. The school health nurses are responsible to her. She coordinates their activities in the school environment, and takes field reports to the Ministry of Health for proper attention and action. The interview was also directed using an interview guide.

- What is school health nurses' role in the school environment?
- How do you determine their performance?
- What are the challenges being faced by the school health nurses in their role?
- How does the management respond to those challenges?



School adolescents were also interviewed. They constitute the focus of school health nurses' role in the school environment. Their opinions were sought on how school health nurses assist them, especially in the area of reproductive health. Their opinions were also sought regarding the challenges school health nurses face in performing their role in advising adolescents at the school. Adolescents' focus group discussions were directed using an interview guide in order to keep the discussions on the right track.

- What areas of reproductive health does the school health attend to?
- What kind of guidance do you receive from the school health nurses on your decision-making about your reproductive health?
- How does she or he carry out this role?
- What challenges does the school health nurse face in performing his or her role?

### **Researcher-as-instrument**

The researcher is perceived as an instrument in qualitative data collection. The target of qualitative study is to gain understanding of the meanings people attach to events, concepts and situations. This requires the researcher to develop theoretical sensitivity, which entails the ability to be responsive and adaptive to the demands of data collection, and also aware of the nuances of meaning of the data. It further encompasses insight in delineating what is pertinent in the data from what is not (Hoepfly, 1997: 50). However, the shortcomings of the researcher-as-instrument includes the inability to control the influence of his or her subjective opinions and judgments, on the study. The subjectivity of the researcher needs to be identified and it has to be stated clearly, how this can shape the collection and interpretation of the data (Merriam & Tisdell, 2015: 16). In conducting the interview, the researcher's theoretical sensitivity was grounded in the extensive literature review, personal experiences, and professional experiences (Hoepfly, 1997: 50). The researcher, as a nurse, minimised his biases by allowing the

participants to discuss issues freely without injecting his pre-determined views, and using the interview guide to direct the process.

### ***Data collection methods***

The data collection methods used in this study were semi-structured interviews and focus group discussions. The semi-structured interviews were conducted on the school health nurses, school teachers, and the school health coordinator, while focus group discussion was used with school-based adolescents.

### **Semi-structured interview**

The semi-structured interview is a means of eliciting information from the participants using a set of predetermined, open-ended questions which cover the areas of interest in the study (Ayres, 2008: 811). The researcher has more control over this kind of interview than he/she would have over an unstructured interview. Using the semi-structured interview requires the researcher to develop, in advance, an interview guide that will be used toward shaping the process. Ayres (2008: 811) further suggests that where the relationships among concepts have been established, the semi-structured interview will come in handy. The understanding, interpretative, responsive preparedness of the researcher to both verbal and non-verbal information by the participants will determine the richness and relevance of the data. The researcher did not allow his values and experiences to interfere with the interview process.

### **Focus group discussions**

The focus group is a technique used in research to obtain information through group interaction (Morgan, 1996: 129). This, in effect, implies that besides being used as a means of data collection, it makes use of group interaction in achieving this. Focus group discussions have been found to be the most effective means of using interaction to elicit meaningful opinions, suggestions and feedback. It further allows for respondents airing opinions, and enables the

researcher to learn from the experiences of every stakeholder on salient issues. Its usefulness further extends to covering complex issues, thereby serving as a complement to the other data collection instruments. The one defining characteristic of the focus group is that it allows for the use of group dynamics in bringing to the fore clarifications and expression which ordinarily would not have been possible in individual interviews (Jayaskekara, 2012: 411). The focus group shares the characteristics of both survey research and ethnographic study, as individuals are asked to participate in a structured interview on a pre-determined issue, while at the same time being asked open-ended questions that produce text-based data (Short, 2006: 104). However, the presence of group dynamics in the process also poses some limitations, as minority opinions could be suppressed, and the opinions of less assertive and vocal group members could be subverted (Short, 2006: 104). The researcher ensured the prevention of the domination of the discussions by some participants while encouraging the passive or less vocal ones to contribute actively. The focus group discussions were used to elicit information from the adolescents.



### ***Data Collection Procedure***

The interview was scheduled in advance and convenient location and time were agreed upon between the researcher and study participants in order not to disrupt their normal activities schedule. The researcher had interactions with study participants for the purpose of familiarity. Pre interview interactions enable the participants to gain much trust in interviewer, and allows the researcher to explain why the interview will be conducted (Mathers, Fox & Hunn, 1998: 1). For the purposes of this study, the researcher recruited and trained two assistants who were always on hand to render supplementary services. Their expectations during the interview were clearly enunciated. The researcher prepared himself by undergoing training in questioning techniques that would aid the process of interviewing, and also to ensure that the study was result-oriented. Asking questions is important in qualitative interviews (Berry, 1999: 3). The

questioning techniques that aid the interview process include asking clear questions, asking single questions, asking genuine open-ended questions, posing experience/behaviour questions before opinion/feeling questions, sequencing the questions, asking probe and follow-up questions, interpreting questions, and avoiding sensitive questions (Berry, 1999: 4). Applications were attached to the copies of ethical approval from the University of the Western Cape, for the permission to collect data. These were transmitted to the gate keepers for their approval to gain access to the study setting. In respect of this study, the Ministries of Education and Health were involved. The school health nurses are the employees of the Ogun State Ministry of Health, while the activities of the school teachers and adolescent students are part of the oversight functions of the Ministry of Education. The letters conveying their approval were collected two weeks after the submission, and these were taken to the study setting. On arriving at each of the selected schools, the team (the researcher and his assistants) went straight to the Head teacher to explain the purpose of the visit. The purpose of the study was clearly explained to them, and provision for clarifications was made, after which a teacher was detailed to render the necessary assistance. The order of interview was as follows: the school health nurses had their interviews first, followed by the adolescents, and lastly, teachers. The purpose of the study was fully explained to all participants. The potential benefits of the study were emphasised to participants. The researcher made it clear that there was no coercion involved, and that prospective participants could, at any stage, decline their participation as their involvement was purely voluntary. They were further informed that the identity of persons, schools and specific location within the local government area would not be disclosed, and that there would not be any unauthorized access to the data collected from them. The participants were told that the study would not cause any physical or bodily harm, but that, should they perceive or feel any emotional distress they would be attended to promptly by either allowing them to discuss their concerns or referring them to a counsellor who would deal with the

situation in their professional capacity. The participants were encouraged to ask questions, and seek clarifications on the areas that were not clear to them. Their informed consent was obtained after all these preliminary activities, and they were asked to sign the informed consent form which is an attestation to the fact that they voluntarily and willingly agreed to participate in the study. The participants were also given the appropriate individual interview and focus group confidentiality binding forms. The interviews took place in a quiet classroom where distractions resulting from noise or movement in the school environment were minimal. The sitting arrangement was in a circular form as this enables for direct contact and interactions with the participants (DiCicco-Bloom & Crabtree, 2006). Consent was granted by participants, to record the discussion using a tape recorder. A high-quality audio recorder was placed strategically to record the discussions. Participants' psychological and emotional comfort was a concern for the researcher and his assistants, and care was taken for the interviews to be conducted in an interactional manner. The participants were not overloaded with questions. The questioning techniques were employed by the researcher. The activities followed a logical sequence as one question was followed by the other in order, as per plan.

### **Probing**

Probing on interesting issues under scrutiny took place, to make adequate clarifications, elaborations, and explanations (Dawson, 2009: 74). It is a valuable means of gaining greater detail from participant responses. A probe can be a word or action used by the moderator to enhance discussion (Hennik, Hutler & Bailey, 2012: 149). Probes were used for both semi-structured interviews and focus group discussions. In order to encourage the speaker to continue talking, the verbal 'ah-ha' probe was used in addition to the use of nonverbal expressions such as nods, gazes, and particular facial expressions. Probes were also used for instant elaboration seeking more information on the topic; for clarification toward tailoring the

interview to the topic; for retrospective elaboration in order to compare what has been said with what the interviewee is saying at the moment (Roulston, 2008: 683).

### **Field notes**

Field notes are the concurrent notes taken in the course of an interview or observation in order to capture the content of the discussion or the essentials of the observation (Thorpe & Holt, 2008: 98). Three forms of field notes are possible during the interview or observation. Mental notes which are often taken when the researcher finds it unsuitable to take notes. Jotted or scratch notes are taken, where the cogent or essential points or issues are written, which will later be developed to capture discussion more fully. Then there are full field notes which are far more detailed. (Thorpe & Holt, 2008: 100) The research assistants took notes on the non-verbal responses of the participants in the setting. The notes further captured the feelings, thoughts, interpretations, and self-evaluation of the researcher. The events that transpired in the course of gaining access to the setting of the study were duly recorded. The setting of the study, which included the arrangement and interactions among people there were recorded. The seating arrangements, the responses, and non-verbal cues of the interviewees were documented. The activities during focus group discussion, especially group dynamics, were also recorded. The researcher and the assistants made use of mental notes and scratch notes as a means of taking field notes. The audiotaped interviews were transcribed verbatim and the field notes taken were built into the transcriptions. The researcher was fully aware of the fact that he was the primary research instrument. Bryman and Cassell (2006: 46) argue that researchers ask questions and interpret the answers provided by the participants in line with their own preconceptions.

### **Managing group dynamics**

The group dynamics were effectively managed during the focus group discussions for adolescents. Group dynamics are the feelings and passions that emanate from the interaction of group members (Toseland & Rivas, 2005: 64). The researcher adopted free floating as the pattern of group interaction which entails the encouragement of communication from the group members by believing in their ability to make meaningful contributions to the topic of discussion (Toseland & Rivas, 2005: 64). Each of the six groups comprised adolescents from both junior and senior arms of the schools. The junior students are often in awe of the senior students. In the same vein, the presence of both male and female students in the same discussion group, on a sensitive issue like reproductive health could preclude the females from making effective contributions. The researcher was aware of all these caveats, hence the need to check the excesses of rambling senior students or male students, as the case may be. The females were encouraged to speak and make contributions. Efforts had been made to get them to realise that reproductive issues demand a stake from both men and women. The junior students were encouraged to make their input as equals. Despite their junior status in the school, they were urged to voice their opinions on reproductive issues. In further managing the group dynamics, the researcher ensured that everyone reduced eye contact, and facilitated this by turning his shoulder toward them and looking down at the interview guide (Millward, 2012: 426).

Exploration of issues continued until saturation was achieved. Saturation is the point where the researcher gathers no new information or what has already been said keeps being repeated (Saumure & Given, 2008: 196). The researcher, being a nurse, was fully aware that his emotions could affect the interview, and thus tried as much as possible to submerge those feelings by accurately reflecting the meaning intended by the participants during the interviews (Morrow, 2008: 143). Each of the individual interviews for school health nurses ran between 40 and 60 minutes per session. For teachers, it lasted 15-20 minutes per session, and for the school health coordinator, it took 30 minutes. The focus groups with adolescents lasted for

about 40 minutes per session. After the interviews were concluded, the participants were motivated to comment on their experiences, which they claimed had been pleasant. There was not any emotional disturbance and they all expressed their happiness to be part of the interviews. The research team thanked all the participants for their cooperation and for the time given.

#### **3.3.3.1.4 Analysing Identified Concerns: Procedure for Data Analysis**

This is the fifth step in the problem analysis and project planning phase of the intervention model (Rothman & Thomas, 2013: 30). It entails the analysis of the data collected in the field through structured interviews and focus groups. Data analysis was conducted by the researcher; and a consultant who served as a co-coder. The consultant is an expert in the use of the qualitative approach for research projects. Results of the data analysis were compared, and the areas of disagreement were resolved by inviting the input of the supervisor.

#### ***Data analysis***

Data analysis is defined as “as a systematic search for meaning.” It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories. It often involves synthesis, evaluation, interpretation, categorization, hypothesizing, comparison, and pattern finding. It always involves what Wolcott calls “mindwork” (Dey, 2005: 31). The researcher adopted the inductive grounded approach method in analysing the data (See the coding process, page 88). The data analysis strategy for this study is constant comparative analysis.

#### **Constant comparative analysis**



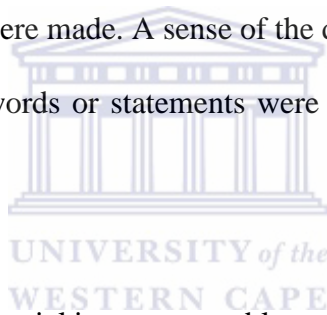
The constant comparative analysis strategy was used in analysing the data, which was collected through semi-structured interviews and focus group discussions. Thorne (2000: 68) argues that this approach was originally designed for use in the grounded theory approach, and it had its roots in symbolic interaction theory. The strategy entails selecting a piece of data (one interview, one statement, one theme) and comparing it with others to see if it exhibits either the same similarity or difference, in order to develop ideas of possible relationships between various pieces of data. This approach maintains its relevance in qualitative studies that aim at generating knowledge about common patterns and themes within human experience. Its suitability for use in grounded theory is anchored on the premise that human phenomena which researchers study encompass human behaviour and experience which requires some explanation of its pertinent social processes.

The aim of the study was to develop a suitable intervention programme for school nurses on guiding adolescents in their decision-making on reproductive health. The research questions were framed in order to gain an understanding of the role of school health nurses in the school environment, and also a knowledge of how adolescents make their decisions about reproductive health, and how these are influenced by school health nurses. Another aim of the study was to explore the experiences of school health nurses on the guidance provided for adolescents on their decision-making about reproductive health, and to further explore the challenges encountered in the course of performing this role. The outcome of the analysis of the data collected in this respect was expected to be used for the programme development. This was why there was a need to aggregate the emergent categories, as themes required guided the thinking of the researcher in achieving the purpose of the study.

### **Data transcription**

The researcher embarked on the transcription of the data immediately after a few interviews. This helped a great deal in keeping track of the interviews, in that important issues and activities

relating to particular interviews could be recalled. Data collected in the field through individual interviews and focus group discussions were transcribed verbatim from the audio tape. The audio tape was played several times pausing it where necessary in order to fully capture the content of the recordings. The field notes were typed up, and the contents which were topic-based were integrated into the main transcripts for data comprehensiveness. The transcription featured vocalized utterances and pauses such as ‘hmm’, ‘ah ah’ ‘ohh’ which, in most cases, indicated a break in the flow of information, or hesitation owing to a lack of knowledge of the information sought. The researcher read through all the data many times in order to get immersed and obtain the general sense of the information and the meaning it conveyed. The participants’ opinions and views on the research questions were carefully checked against the context in which the statements were made. A sense of the depth of the information given was also obtained. Clarifications of words or statements were made with the participants where necessary.



### **Coding Process**

Coding entails organizing data material into manageable proportions before attaching meaning to it (Rossman & Rallis, 2003: 171). Put differently, the data obtained during the data collection phase are segmented into categories, those categories are labelled with a term (Creswell, 2009: 186).

In coding the data, the approach developed by Aurebach and Silverstein (2003: 35) was adopted by the researcher. The coding procedure has three stages, and each phase has sub statements that constituted the steps that represent the activities that must be undertaken in order to actualise the coding. The stages and their steps are as follows:

1. Making the text manageable

Step A: Explicitly state your research concerns and theoretical framework.

Step B: Select the relevant text for further analysis. Do this by reading through your raw

text with step 1 in mind.

2. Hearing what was said

Step C: Record repeating ideas by grouping together related passages of relevant text.

Step D: Organise themes by grouping repeating ideas into coherent categories.

3. Developing theory

Step E: Develop theoretical constructs by grouping themes into more abstract concepts consistent with your theoretical framework.

Step F: Create a theoretical narrative by retelling the participant's story in terms of the theoretical constructs.

For the purposes of this study, only steps 1 to 4 were adopted. The central idea of coding is to move from raw data to research concerns in small steps, with each step building on the previous one. The study is an intervention research which aims at offering interventions or solutions to the practical problems. The intervention design and development model is a problem solving process for seeking effective intervention and helping tools to deal with given human and social difficulties (Rothman & Thomas, 2013: 12). The research project was not inclined toward developing a grounded theory. Instead, it sought to assist school health nurses on guiding adolescents in the decisions they make about their own reproductive health which conferred on the study its intervention status. In intervention studies, the generation of themes will allow the researcher to focus on the areas that require more attention than others, in order to address the challenges in these areas.

***Stage 1: Making the text manageable***

**Step A: Explicitly state your research concerns and theoretical framework.** The research concerns were used to select relevant text. A research concern is what you want to learn about and why. The research concerns here are the research questions formulated, the answers to which would provide clues about the type of intervention programme that would be developed

to assist school health nurses on guiding adolescents in making their decisions. In addition to the research concerns, the theoretical framework chosen for the study was taken into account in choosing what was included and excluded. The transcribed texts were read repeatedly for proper understanding and immersion. Coding was done by the researcher, and a consultant who is a research expert, to avoid missing important data and in order to compare notes. Portions of text were checked against research concerns to determine their relevance.

**Step B: Select the relevant text for further analysis.** Relevant text is a segment or passage of the transcripts that indicates a distinct idea which relates to research concerns (Aurbach & Silverstein, 2003: 46). In achieving this, the researcher placed the transcripts in a file and stored them on a computer. Anytime the researchers found a segment or passage that contained an idea relevant to the research concern, the highlighting function in the word processing programme was used to mark it. The researcher kept reading in order to discover more relevant segments. This was done for all the transcripts of every interview i.e. school health nurses, secondary school adolescents, school teachers and the school nurse coordinator. The statements in parenthesis constituted the relevant text. The passages (relevant text) were copied into separate files, one each for every person, and one for each focus group. The files were saved in a larger project folder. The header indicated the date the file was created, and information relating to the participants and the number of schools used was recorded. The field notes were incorporated in the interviews. Deciding on the relevance of text is subjective. However, the inclusion of information should relate to: the research concern, helping the researcher to understand the participants better, clarification of thinking, and the seeming importance of the information, even if this is not immediately clear to the researcher (Aurbach & Silverstein, 2003: 48). The re-reading of the text enabled the researcher to be more familiar with it and develop a sense of what is important and what is not. Underlining was done impressionistically, without much conscious thought. The meaning of the text became clearer at the end.

Research concern: How do adolescents make their decisions on reproductive health?

Research concern for focus group: What kind of guidance does the school health nurse provide on your decision-making on your reproductive health?

Orphans

These are the relevant text segments that were not repeated. The transcripts were searched again looking for text that could go with the solitary text. Some of these orphans were retained, the researcher having found that they were important, and the rest that were not related to the research concerns were discarded (Aurbach & Silverstein, 2003: 59).

### *Stage 2: Hearing what was said*

#### **Step C: Discover repeating ideas by grouping together related passages of relevant text**

It manifested in the expression of the same ideas, sometimes with the same or similar words on a particular relevant text. A repeating idea is an idea expressed by two or more research participants (Aurbach & Silverstein, 2003: 54). The selected relevant texts were searched for repeating ideas. The repeating ideas were identified in each separate transcript. The repeating ideas of each set of participants were grouped together i.e. the repeating ideas under each topic for all school health nurses were grouped together, that of school teachers were grouped together, and groups were put together to form a composite list for each set of participants. A file was created for each of the groups. Each of the files became a list of repeating ideas. The first selection was made after being highlighted and copied into the repeating file. This is known as starter text. Other relevant data on the same topic was moved into the file containing repeating text till the data were completely exhausted.

Research concern for focus group: What kind of guidance does the school health nurse provide on your decision-making regarding reproductive health?

**Step D: Organizing themes by grouping ideas into categories.** A theme is an implicit idea or topic that a group of repeating ideas have in common. The researcher organized the repeating

ideas answering the different research questions, in order to come up with their respective themes. The researcher opened the file which contains the master list of repeating ideas, and another new file was created for the themes. The master list of repeating ideas was read through from the starter idea. The ideas that related to the starter idea were highlighted and copied onto the theme list. The list of repeating ideas was read until the researcher had selected and copied all the repeating ideas similar to the starter idea, and to each other. Each group of repeating ideas constituted the respective themes. Reading through the list continued until all the repeating ideas had been given a theme.

**3.3.3.1.5 Setting Goals and Objectives of the Study:** A goal is a statement specifying the general purpose of the study which in most cases is single and broad, while objectives are specific statements showing the focus on fundamental issues in a research study (NCHS, 2010: 38). Mills, Durepos & Wiebe (2010: 817) explains that an effective objective possesses four features: usefulness, feasibility, unambiguity and being informative. Usefulness is demonstrated when the research project contributes to solving a theoretical set of problems, and is able to demonstrate how the research project will be relevant to the organization or the institute empowering it. The research objective is feasible when the necessary knowledge and resources are accessible, and these are often related to the time allotted the project by the enablers. Unambiguity finds its expression when there is accurate manifestation of the research contribution to addressing the theoretical or practical problems. The objective becomes informative when it gives the general clue as to the kind of knowledge the research activity will produce.

#### ***Intervention goal***

The goal of this intervention programme is to enhance the school health nurses' abilities to guide secondary school adolescents in their decision-making on reproductive health.

### ***Intervention objectives***

- 1) To develop an intervention programme that will enhance the performance of school health nurses in the area of guiding adolescents in their decision-making on reproductive health
- 2) To test the intervention programme with school health nurses on a small scale
- 3) To assess the quality and outcome of the intervention implementation

#### **3.3.3.2 PROCESS OF INFORMATION GATHERING AND SYNTHESIS**

This is the second phase of intervention design and development (Thomas & Rothman, 1994: 31). The phase is titled “Not Reinventing the Wheel”. Simply put, it is highly essential to discover what has been done in a particular area by others, to address and understand the problems in order to avoid repetition. The activities may involve developing a programme as either an addition to an existing programme, or may be employed to develop an entirely new programme. This entails acquisition of knowledge by identifying and selecting relevant types of knowledge. This was achieved by using and integrating appropriate sources of information. This phase addressed the literature review on what other scholars have done in respect of programmes designed for school health nurses on guiding adolescents in their decision-making on reproductive health. The implementation of this phase requires activities in three aspects which are:

- Using existing information sources
- Studying natural examples
- Identifying elements of successful programmes

##### **3.3.3.2.1 Using Existing Information Sources**

This requires a detailed search for information on empirical research from different sources. The data that serve as the basis for intervention could be sourced from basic and applied

research. These two function as the primary sources of information in knowledge utilisation. Information can also be sourced from scientific technology, allied technology, legal policy, indigenous innovation, practice, personal experience, and professional experience (Rothman & Thomas, 1994: 13). In sourcing information for this study, the researcher looked beyond literature in health studies, and extended the search to social sciences and humanities because adolescent reproductive health issues stretch beyond the frontiers of health disciplines. Adolescent reproductive health issues are fast receiving attention across disciplines such as developmental psychology, social psychology, and anthropology owing to the magnitude of the implications in numerous facets – hence the need to integrate knowledge from these various disciplines to impact on the quality of the information needed for programme development (Tonkin & Frappier, 2003: 73). This is essential as intervention research is expected to contribute to the generation of new knowledge about behaviour-environment relations (scholarship of discovery), as well as establish new linkages between concepts and methods of various disciplines (Rothman & Thomas, 2013: 32). The researcher looked in the literature on school health nurses' activities that covered adolescent reproductive health. Policy statements on school health programmes in Nigeria were examined as well.

#### **3.3.3.2.2 Studying Natural Examples**

Studying natural examples means that people or populations concerned i.e. those who actually experience the problem, are interviewed in order to gain knowledge about the interventions that might or might not succeed, and the variables that may affect the success (Rothman & Thomas, 2013: 32). It also requires that the study of non-examples be undertaken, as this will provide an insight into why the programme was unsuccessful. This was achieved in step three of the problem analysis and project planning phase. It involved the use of semi-structured



interviews and focus group interviews to develop an insight into a suitable intervention. The concerned people i.e. the target population in this study were:

- School health nurses who provide services for adolescents in secondary schools in Ijebu Ode local government area
- Adolescents in secondary schools in Ijebu Ode local government area who are the beneficiaries of their services
- Teachers in secondary schools that have school nursing services
- A school health programme administrator who is responsible for the coordination of school nursing services.

#### **3.3.3.2.3 Identifying Functional Elements of Successful Programmes**

This was achieved through an integrative review of literature on the programmes that were developed for school health nurses, on the methods used to empower them to guide adolescents in decision-making on reproductive health. The essence of this activity was linked to the need to identify the functional elements of programmes that have previously addressed the problem of interest. A broad range of issues in respect of existing intervention programmes were determined through analysis of the data collected. Fawcett et al (2013: 33) have identified the following issues as part of what should be considered.

- The effectiveness of such programme
- Success or failure of such a programme, and the causes of programme failure
- Events critical to the success or failure of the programme
- The specific procedures used in the programme
- Information provided to clients or change agents on how and under what conditions to act

- The use of modelling, role play, practice, feedback and other training procedures
- Positive consequences (rewards or incentives) or negative ones (penalties or disincentives) that helped in establishing and maintaining desired changes, or working against desired changes
- Absence of environmental barriers, policies, or regulations that could impede changes from taking place

Rothman and Thomas (2013: 33) argue that studying successful and unsuccessful programmes enables researchers to identify the elements of an intervention that are useful. It was against this backdrop that the researcher set out to conduct an integrative review of literature.

### *Integrative literature review*

This is the most extensive of all the research review methods as it allows for concurrent inclusion of experimental and non-experimental studies such as case studies, observational studies toward understanding to the fullest extent the issue of concern or interest. It allows for adequate room to define concepts, to review theories, to review evidence, and to analyse methodological issues of a particular topic (Whittmore & Knafl, 2005: 546). Russell (2005: 8) argues that an integrative review helps in evaluating the strength of the scientific evidence, identifying gaps and bridging gaps between related areas of work, and identifying central issues in an area. The efforts in the integrative review go beyond summarizing the selected studies, to analysis, thereby creating the means for comparing articles, and identifying themes and gaps. It does not make use of statistics to produce conclusions about studies.

### Review questions

The main integrative review question and sub-review questions were generated (See page 179).

## Studies included in the review

The relevant general knowledge areas were identified. The multiple knowledge sources approach is recommended in order to achieve knowledge integration (Rothman and Thomas, 2013: 143). Information was sourced from scientific technology, allied technology, legal policy, indigenous innovation, practice, personal experience, and professional experience (Rothman & Thomas, 2013: 13) [See chapter five for details].

## Types of Participants

In this review, the target population was school health nurses. The school health nurses, in collaboration with other health workers, are responsible for the health of adolescents in secondary schools in Nigeria. This role is enshrined in the school health policy of the country (Federal Ministry of Education, 2006a: 12). Adolescent reproductive health in the secondary school environment demands the input of school health nurses, who are the most visible health professionals in the school system, with the active collaboration of the teachers in the context. Cooper (1998) holds that effecting data collection requires the use of informal, primary and secondary channels, and also personal research findings.

## Selection criteria

Eligibility criteria were set for the selection of articles: review articles, descriptive studies, triangulated studies, comparative studies, randomised controlled trials, and qualitative studies (See chapter five for details).

## Search Methods

Literature was mainly sourced from computerised databases. The computerised databases used included: CINAHL (Cumulative Index for Nursing and Allied Health Literature), ERIC

(Educational Resources Information Centre), PubMed, Google Scholar, and MEDLINE (See details in chapter five).

### **Evaluation of data**

This is the stage where data elements would be assessed when being considered for review. This can be determined before data collection (a priori) or assigning weight to the data elements in all the articles (a posteriori). Implicit in this decision is that less weight is assigned to the weak articles (Cooper, 1998: 104) [See details in chapter five]. The choice of Cooper in guiding the integrative review was as a result of his significant contributions to systematic and integrative reviews (Russell, 2005: 3).

### **Data Analysis**

Data analysis entails the description of themes that emerged from each study, procedures that were common to all the programmes, the delivery modes, contexts, similar programme elements and respective outcomes of those studies. In view of the fact that the intervention programmes reviewed were diverse and dealt with different aspects of the practice area, this made for an arduous task in forming a conceptual integration from the review activity. The analysis of the data extracted did not require any statistical input. Cooper (1989:108) posits that the integrative review that focuses on identification of intervention would not involve the use of statistics in arriving at a conclusion. The standardized table format allowed the authors to do some comparison of the data.

### **3.3.3.3 DESIGN PROCESS OF AN INTERVENTION PROGRAMME**

Design has been described as a stage of deliberately effecting a planned change in intervention research, and entails the generation of intervention constructs. It assumes that research findings can be methodically woven into social conceptual elements (Fawcett et al., 2013: 164). Simultaneous development of the intervention and measurement models have been identified

as an attribute of all intervention research (Fraser et al. 2009: 30). Put differently, the design phase requires methods of observing and measuring the outcome of intervention on the group or clients it is intended for, and the development of content, training methods, learning materials, and delivery formats for the intervention programme. Designing an observational system and specifying the procedural elements entailed some activities. First, the researcher sent an invitation to three lecturers in three of the higher institutions within the State. One of the lecturers from the Education Faculty is an expert in instructional design, the second one is a subject matter specialist from the Faculty of Social Sciences, and the third one is a specialist in educational evaluation, also from Education Faculty. The team also included an experienced public health nurse tutor and practitioner who had worked in school health services for several years before becoming a tutor at Ogun State College of Health Technology. The researcher sent a copy of the research proposal in advance to the invitees for their perusal. After reaching a consensus as to when they would be available, a one-day meeting was scheduled for the purpose of design. The venue of the meeting was one of the well-ventilated conference rooms of one of the institutions in the State. On the scheduled day, the meeting started in earnest, the sitting arrangement was in a circular form, and all the team members were made comfortable. The activities lasted for six hours, during which the researcher presented the findings from phases one and two of the intervention design and development model to the audience. Besides the information presented by the researcher, relevant texts and documents on the topics were made available.

#### **3.3.3.3.1. Procedure for designing an observational system**

##### ***Assessment of intervention programme outcome***

The team deliberated on the means of assessing the outcome of the intervention programme. They suggested, based on their expertise, design experience, the findings from semi-structured interviews and focus group discussions, and integrative reviews that the intervention

programme should be subject to both formative and summative assessment. Simply put, both formative and summative assessment dimensions should be used to assess the effectiveness of the training programme in terms of conforming to design criteria and outcome. The experts proposed the utilization of a 9-Step Process model for assessment by Wall (2014). Though the model has nine steps, the researcher was advised to modify it in order to align with the selected phases in the intervention design and development model which guided the research process and intervention activities. According to Wall (2014: 210), the nine steps of which the model is comprised are as follows:

- Defining purpose and scope of evaluation
- Stipulating evaluation questions
- Indicating evaluation design
- Creating data collection and action plan
- Data collection
- Data analysis
- Recording findings
- Disseminating findings
- Feedback to programme improvement



The first seven steps were adapted for the assessment of the outcome of the training programme.

### **3.3.3.3.1 Procedure for specifying procedural elements of the intervention**

#### ***Content design***

Generating ideas that are suitable for topics, and evolution of the means of assessing the outcome of an intervention programme such as a training programme, require some degree of creativity. Creativity has been described as the generation of new ideas or reemerging of known

elements into something novel toward the provision of solutions to a problem (Sefertzi, 2000: 3). There are three core types of creativity: combinational creativity, exploratory creativity, and transformational creativity (Boden, 1998: 347).

- Combinational creativity entails merging of ideas one is used to, and using these to formulate something unique.
- Exploratory creativity focuses on extracting ideas from structural concepts by searching those concepts.
- Transformation creativity finds its expression in the alteration of some dimension of the structure of ideas toward creating something new.

Creativity was the main force behind sourcing information from findings and documents presented to the team, toward the creation of programme content, accommodating learning styles, selecting and employing teaching methods, and choosing delivery modes on the one hand, and the means of evaluating the programme during and implementation on the other. The main creative technique the group adopted for the generation of ideas was brainstorming.

### **Brainstorming**

Brainstorming is a strategy of generating a large quantity of ideas from a group that concerns itself with the task of finding solutions to some definite problems in a relatively short period of time (Sefertzi, 2000: 5). It is an activity that takes place within a group of people for which a leader and recorder are needed. The leader directs the activities of the group, and introduces the issues that require brainstorming. The individual stimulates and sparks off debate on those issues. The recorder documents the ideas generated during the session.

### **Four basic rules of brainstorming**

- There should be no criticism and no prior judgement of ideas.
- All ideas, whether they are considered rational, irrational or absurd, must be welcomed.

- Profuse generation of ideas is encouraged as it helps in bringing out their quality as well.
- Ideas generated are shared and merged among the members of the group. They juxtapose and combine the ideas they have generated, and merge them to form something novel.

### **Process of brainstorming**

- Stating the problem and calling for solutions. The researcher restated the purpose of the research which members had already familiarised themselves with through the research proposal. The key concepts identified were reproductive health, adolescent, decision-making, guidance and school health nurse. They agreed unanimously that their focus should be on those concepts, and what they can proffer as a means of assisting school health nurses in the area of guiding adolescents in their decision-making on reproductive health.
- The warm-up session entails getting them ready for the brainstorming activities. The researcher called for observations and comments regarding the planned activities. They were asked to go through the documents again, and the points raised were noted.
- Brainstorming, and identifying the wildest ideas. Each concept was presented in a serial order. The researcher, who doubled as the leader of the group, called for contributions on what would be included as elements of those concepts. A flurry of ideas came up unrestrained, and these were documented by the recorder. All ideas irrespective of their nature were acknowledged. Put differently, whether ideas were perceived to be logical or illogical, rational or irrational, they were recorded, after which sorting was done on the basis of their relevance and relatedness. The concepts were structured into topics, while the elements later became sub-topics. Suggestions came in different forms. All these were organised and built in to enrich the quality of elements that constituted the



core of the topics. Task analysis and topic analysis guided the brainstorming activities that surrounded the generation of ideas for the creation of topics and constituent elements in relation to the knowledge and skills needs of school health nurses.

### **Task analysis**

The process of identification of content and its elements, and breaking of the content into topics requires the delineation of tasks that learners should be taught, and the knowledge and skills that need to be developed. This focus of the analysis is on creating learning topics and skills, and also creating case-based situations which resemble true-life experiences (Ghirardini, 2011: 44).

#### Steps in task analysis

- Identification of tasks

The team identified the role and responsibilities of school health nurses in the school environment in line with national school health policy. The team concurred that the task of school health nurses is to provide guidance to adolescents in their decision-making on reproductive health and that this is one the core roles of school health nurses. They identified guidance as the main task in this process, and felt that school health nurses must understand and acquire the necessary guidance skills if they are to discharge the role well. The meeting identified communication and developing effective interpersonal relationships as tasks school nurses need to understand before they can guide adolescents well. They identified communication skills, and interpersonal skills as skills they should acquire.

- Classifying tasks

Communication, and developing good interpersonal relationships are procedurally based because they require step-by-step instructions on how to proceed, and they are not too complex to be regarded as principle-based. Principle-based tasks are highly conceptual in nature.

- Breaking up the tasks

The tasks are broken down for the sake of simplicity. Communication tasks involve active listening, questioning, feedback, developing competence while interpersonal relationship tasks are broken down into the process of self-awareness, the process of building relationships with adolescents and teaching staff, and the process of guidance on decision-making by adolescents about their reproductive health.

- Identifying required knowledge and skills to perform these steps

The skills needed for communication such as listening skills, questioning skills, feedback skills, and communication competence skills were classified as communication skills. Self-awareness skills, the process of self-awareness, the process of guiding adolescents in their decision-making in reproductive health were all classified as guidance skills and process.

### **Topic analysis**

Topic analysis is used to complement task analysis activities. It comes into play where information or knowledge of concepts is involved. It has two steps; these are: Identifying course content, and Classifying content elements.

- Identifying course content

Based on the issue selected for discussions and deliberations, concepts such as reproductive health, adolescence, decision-making; and roles and responsibilities were identified as the core of the content.

- Classifying content elements

This helps in acknowledging the link among concepts or topics. In this case, the following links were made which linked the elements of adolescent and reproductive health: adolescent and decision-making, adolescent and guidance, school health nurse and roles and responsibilities.

### **Sequencing**

Sequencing is a means of ordering learning content in order to facilitate its acquisition by learners. Ordering of content should be presented so that the most general content is introduced first. Sequencing creates a means of getting topics to follow one another in a manner that enables the learner to link the preceding topic with the following ones as teaching proceeds (Fink, 2013: 128).

### **Benefits of sequencing**

- Provision of concrete arrangement for both teacher and learner
- Prepares learner for learning activities by reducing tension
- Increases learner's prospects regarding learning activities
- Motivates learners in terms of getting positive results from their learning efforts



### **Techniques for sequencing**

The task analysis technique was adopted (Ros & Lizenberg, 2006: 1). The task analysis method that was used in content identification encompassed sequencing as part of the process, in the structuring of the content, and its subsequent delineation into topics and accompanying elements. The task analysis method was supplemented by topic analysis, which also involved some sequencing, as the content was fragmented into topics and elements that are connected within and between the topics in an ordered fashion.

### **Modular organisation**

All the identified topics were organised and structured into modules. Each module contained a topic and sub-topics with their respective components, and these were transformed into study units. The purpose of each module was stated, and the learning objectives for each study unit

were equally also stated. The learning methods, learning materials, duration of lessons and delivery formats were indicated.

### **Modular sequencing**

The ordering of modules followed the pattern adopted during the sequencing of content concepts and elements. The topics were arranged in a manner that ensures integration of ideas by the learners. It ensures the flow of ideas from one topic to another. The question of role and responsibilities featured first, followed by reproductive health, the concept of adolescence, decision-making and adolescent decision making, communication, and guidance. The modules were arranged so as to link the topics and ideas with one another.

### **Post-design activities**

After designing the mode of assessing the training programme, the content, and the identification of learning methods and learning materials, the training programme was packaged in form of modules. Six modules covering all the essential aspects of the intervention were created. The modular structure was sent to all the team members who had participated in the design process for their comments, and for them to check the extent to which the brief of the design, as agreed upon, had been met. Their comments, which touched on length of training, and the duration of topic delivery were built into the final version that was pilot-tested by the researcher.

## **3.3.3.4 PROCESS OF DEVELOPMENT AND PILOT TESTING OF AN INTERVENTION PROGRAMME**

### **3.3.3.4.1 Recruiting the participants**

The researcher approached the gatekeepers six weeks before the commencement of the training workshop. They, incidentally, were the officials to whom school health nurses were responsible. A letter stating the intent and purpose of the training workshop was submitted

alongside the ethical approval from the University in order to enlist their consent and cooperation. They were told that government would not bear the financial burden of the training. The researcher was obliged with the list of the available school health nurses who he contacted on phone for invitation. In addition, letters of invitation were formally routed through the gatekeepers to them. Eight school health nurses were working in various schools within the local government area where the pilot testing of the training programme took place. Two of them were not available at the time of preparing for the pilot testing. The remaining six school health nurses responded positively to the invitation.

Gatekeepers in the Ministry of Health were approached for assistance on logistics. The Ministry volunteered the use of one of the seminar rooms of the State's School of Nursing. A letter of permission to access the venue was presented to the Principal of the school. The venue was adequately prepared to meet the expectations of the training workshop.

#### **3.3.3.4.2 Data collection method**

The qualitative approach was used in collecting data for both formative and summative assessment of the programme. A semi-structured interview method was used to elicit participants' views on the organisation, the conduct of training team members, training methods and the outcome of the training programme. In addition, observational methods were used to assess the process of the training programme's implementation.

#### **3.3.3.4.3 Interview guide for qualitative aspect of evaluation**

The interview guide was developed to direct the questions during interviews. The following questions were used during the interview:

- What is your view about the content of the training programme?
- What can you say about the methods used in teaching you?
- Can you comment on what you have achieved from the programme?

- What is your view about the organisation of the programme, and the conduct of training staff?

#### **3.3.3.4.4 Data collection process**

On the day the workshop commenced, the researcher reiterated the purpose of the training workshop, and that participation would be voluntary, that any of the participants could decline further participation without any fear of victimisation. Participants were further informed that the pilot test would not involve any invasive activities, that no physical harm was envisaged. The interview process was fashioned after the one that took place in phase one of the intervention design and development model when data were collected for problem analysis and project planning.

#### **3.3.3.4.5 Data analysis**

Inductive content analysis was undertaken. Data from the interviews was coded and placed in categories which yielded the themes that captured the views of the participants regarding the training workshop. The steps used in analysing the data collected during phase one of the study was adopted (See chapter on methodology). Spradley's abridged 9 categories of phenomena (Whitehead, 2005: 11) were used to analyse the observed events that took place during the implementation of the training programme.

### **3.4 RIGOUR IN QUALITATIVE RESEARCH**

The researchers who work within the interpretivist/constructivist paradigm have adopted the concept of trustworthiness as an alternative term for validity, reliability and generalizability for their qualitative work (Loh, 2013: 4). The issue of validity in qualitative research should not be captured under truth or value as obtained among positivists. The term "trustworthiness" is preferred, which means the process of research should be visible and auditable (Sandelowski, 1993: 1). Auditability entails tracking and verifying the research process. Polkinghorne in Loh (2013: 4) is of the view that validity is a function of intersubjective judgements which derive

their strength from a consensus within a community. On the basis of this assertion, it is the work of Guba and Lincoln on trustworthiness that was adapted (Loh, 2013: 4). Lincoln and Guba in Loh (2013: 5) list four criteria of trustworthiness: credibility, transferability, dependability and confirmability, and the techniques for achieving these. The techniques help in directing the field activities, and monitoring the compliance with the proposed procedures. Put differently, the techniques are a means of assisting the researcher working within the confines of the constructivist paradigm to understand the process involved, in order to deliver a quality product that will be accepted by the research community.

### **3.4.1 Credibility**

Credibility corresponds with internal validity as used by the positivist researcher. This has to do with whether the study really measures or tests what is actually intended. Credibility in qualitative study raises the issue of congruence of the findings with reality. It is one of the most important means of ensuring trustworthiness. The techniques for achieving credibility include the following:

- Adoption of research methods well established in both qualitative investigation and information science. The data collection and analysis strategies, and information seeking process should derive from the approaches that have been used successfully by others in previous, comparable projects. The researcher adopted the intervention design and development model of Thomas and Rothman (1994; 2013) which has been successfully used by many PhD students in developing frameworks, intervention programmes, guidelines, and models (Londt, 2004, Mabuzo-Makoko, 2005, Ganyaza-Twalo, 2010, Olaore, 2010, Bimerew, 2013 & Warri, 2014). The research approach used by these researchers in their respective studies is the qualitative approach and this guided them in their data collection and data analysis. By the same token, this researcher used qualitative strategies in collecting and analysing the data. In the

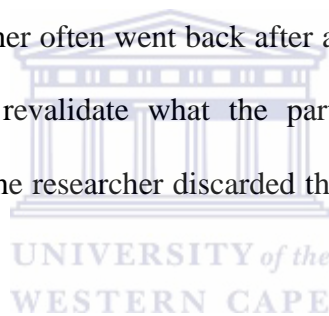
secondary research which centres round the integrative literature, the researcher adopted the strategies enunciated in the qualitative approach to select and search articles for items needed for the review. The analysis of the data extracted followed a logical pattern as indicated by Thomas and Rothman (2013:133).

- Developing early familiarity with the context of the proposed study through appropriate documents and preliminary visits. This involves prolonged engagement between both the participants and researcher. This researcher had interactive sessions with the gatekeepers in order to acquaint them with his research intent, and enlist their cooperation. The school environment is the study context. The researcher had earlier developed a rapport with the school health nurses, adolescents, and school teachers in their respective schools before formally seeking their consent to participate in the research, which was prompted by the approval granted by the gatekeepers. The level of familiarity was modest so as to avoid whittling down the motive of the visit. The interaction enabled a good understanding of the research purpose by the participants and the researcher gaining their trust.
- Triangulation of the sources and methods of the data was undertaken by the researcher using interviews and focus groups as a means of data collection. The interview was audiotaped, and this was complemented with field notes which documented some of the verbal responses and nonverbal cues. There was post-interview discussion in order to review what was discussed between the researcher and the assistants on the one hand, and between the research team and the participants on the other hand. Information on school health nurses' role in adolescent reproductive health, especially in their decision-making, was not only sourced from the school health nurses but sought also from teachers, adolescents and the school administrators. This allowed the researcher to



compare information obtained from the different sources and also corroborate information supplied by the school health nurses.

- Honesty in informants was achieved by the researcher by his request to participants from the outset to be frank about the information they would give. For this reason it was emphasized that participation was voluntary. In addition, the researcher informed them that the information supplied would not jeopardize their interests and that they would remain anonymous. The interview was conducted separately for each group of participants so as to avoid influencing the responses of members.
- Iterative questioning was also used to ensure credibility of the study and this was achieved by rephrasing the questions and by creating a loop in the way the questioning was handled. The researcher often went back after an interval of one or two questions to the previous one to revalidate what the participant had said earlier. Where contradictions occurred, the researcher discarded the suspect data or asked for further elaboration.
- The researcher used frequent debriefing to ensure credibility by discussing outcomes of the data collection and analysis with the supervisor and the consultant, and getting their input. The transcribed data was subject to the supervisor's scrutiny, and a second opinion was obtained on the data analysis.
- Peer scrutiny entails using the panel of experts or an experienced colleague to reanalyse some of the data (Rolfe, 2006: 305). This came in handy during the analysis of data as the input of fellow PhD students assisted in no small measure. Discussions on qualitative analysis often arose, with everybody sharing their cross-disciplinary experiences. This added value to the researcher's work. The data analysed was thoroughly examined by others for their scrutiny and comment.



- The process of member checks encompasses returning to the participants following data analysis (Rolfe, 2006: 305). However, Shenton (2004: 68) argues that checks relating to the accuracy of the data can take place immediately where the data was collected in the course, and also in end data collection discussions. Informants were asked to read the discussions transcribed for their opinions and input. The researcher checked with the informants as to whether there was any correlation between the words used and what they had actually intended. The themes generated were taken back to them to give them the opportunity of providing alternative interpretations. Their suggestions were built into the data analysis and data presentation.

### **3.4.2 Transferability**

Transferability is an alternative construct for external validity in positivist research. Merriam in Shenton (2004: 69) describes the extent of applicability of the findings to other situations. The applicability of qualitative research findings is limited by the fact that the sample size is not representative of the study population and is contextually based. This was addressed by providing adequate information on the study settings. The description of the school setting in Ijebu Ode Local Government Area was accurately presented. The research purpose was adequately portrayed in the study. The representations on the number of participants involved in the study, the data collection methods, and the number and length of data collection sessions were made.

### **3.4.3 Dependability**

This is reliability in positivist's parlance. It indicates the repeatability of the methods and procedures used in arriving at the conclusions (Shenton, 2004: 68). The research design and methods used in data collection and analysis were fully described in the study. The details of data gathering activities were also provided. The researcher, in addition to the above means,

pondered and appraised the process of inquiry undertaken by developing a checklist of the activities involved in the inquiry against the standard protocol.

#### **3.4.4 Confirmability**

This is a version of objectivity in positivist's language. Triangulation plays a good role in maintaining confirmability in qualitative study. Triangulation as applied to credibility was observed to ensure that the investigator's bias was reduced. The researcher also indicated his own prejudices and how these were kept in check in order to lessen its effect on the data collection process and analysis outcome. The researcher provided a detailed methodological description of the study. Confirmability was equally achieved through the presentation of representative quotations from the transcribed text to show a connection between data and results (Elo, Karariainen, Kanste, Polkki, Utriainen, & Kyngas, 2014:6). The researcher used an audit trail by representing the research process diagrammatically, which shows how the data collected and analysed led to the basis of the intervention programme development for school health nurses on guiding adolescents in decision-making about reproductive health.

### **3.5 ETHICS STATEMENTS**

Gaiser and Schremier (2009: 25) identify the following ethical issues which were considered in the course of carrying out the study: informed consent, confidentiality and anonymity, privacy, right to withdraw, and dissemination of results.

**3.5.1 Informed consent:** Informed consent entails placing the participants in a situation where they can decide, in full knowledge of the risks and benefits of the study, whether and how to participate (Endacott, 2004: 313). Participants were fully informed of the research aims, and potential benefits and disadvantages. At no time did the researcher make the participants feel coerced to participate in the study, or to be unduly persuaded by the promise of a reward. The research participants were made aware risks that may occur as a result of their involvement in

research. Informed consent requires that this information is transparent and in language which the participant can understand (Royal College of Nursing, 2009: 4). Information was verbal and written, and time was provided for the participants to consider their involvement in the study and to ask questions. To this end, a consent form was signed by the participants.

**3.5.2 Confidentiality and Anonymity:** Confidentiality and anonymity are the ethical injunctions that forbid the researcher from breaching the agreement reached with the participants on how to keep the data collected secure, and refraining from revealing their identities (Sieber, 2009: 127). This was provided and maintained by concealing the identities of all participants during and after the data collection phase. The audio tape recording was kept secure by passwording the file. All confidential data were stored in a locked cabinet which can only be accessed by the researcher. Pseudonyms were used instead of participants' names, in analysing the data. Thus the identities of research participants were protected in research reports detailing the findings or in the presentation of findings.

**3.5.3 Privacy:** Privacy refers to the interest of individuals to control the access that others have to them (Sieber, 2009: 127). The entry of the researcher and the assistants to the research setting were through the respective gatekeepers who grant permission before the commencement of the interviews.

**3.5.4 Right to withdraw:** The right to withdraw was conceded to the participants by explaining to them that their participation would be voluntary, and they could decide to decline participation or even withdraw at any stage should they so desire without prejudice or threat of being punished or victimized for doing so. The right to withdraw was extended up to the point at which data analysis began (Smith, Flowers & Larkin, 2009: 54). The right to withdraw was made explicit to the participants at the start of the research, mainly at the point when informed consent was being sought.

**3.5.5 Avoidance of injury:** Creswell (2009: 91) asserts that researchers should anticipate the possibility of harmful, intimate information being disclosed during the period of data collection. Efforts were put in place to minimize this danger by asking the participants upfront not to disclose the identities of the people involved in their discussion. No physical injury was envisaged as the study did not require any invasive or pharmacological treatment. However, the researcher was cognizant of the fact that the study might conceivably leave psychological or emotional scars on the study participants, and to this end, the researcher asked the participants to express their feelings, and encouraged them to make inquiries, and also allowed for interactive session after the data collection exercise when emotional concerns were discussed and addressed.

**3.5.6 Dissemination of results:** The researcher was wary of language that was biased against persons because of gender, sexual orientation, racial, religious, ethnic group, disability and age (Creswell, 2009: 92). This was addressed by reporting the findings objectively. The findings were not skewed in favour of or against any particular interest.

### **3.6 SUMMARY**

This chapter discussed the methodology of the study. It further examined the qualitative research approach, and Intervention Design and Development model which constituted the research design for the study. The four phases of intervention design and development were used in guiding the research activities toward realising the research objectives and goal. This culminated in the development of the intervention programme for school health nurses on guiding adolescents in their decision-making on reproductive health. The research rigour was described, and ethical statements were presented.

## **CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS**

### **4.1 INTRODUCTION**

This section deals with the presentation and discussion of findings from the analysis of data undertaken. The analysis of data was performed. This yielded themes and sub-themes needed for developing an intervention programme that will assist school health nurses in guiding adolescents to make decisions on reproductive health. The Intervention Design and Development model emphasizes that concerns involving intervention which might include social and personal factors relating to the people involved will require intervention to produce a change (Rothman & Thomas, 2013: 4). School health nurses constitute the target of this study. Their problems require detailed attention in order to improve on their role performance. Fawcett et al., (2013: 25) caution that the intervention researcher should avoid imposing external views on the problems, and on solutions to these problems in the course of addressing target population problems. The concerns were identified by using semi-structured interviews for school health nurses, the school health coordinator, and school teachers, while secondary school adolescent students were engaged in focus group discussion. The interview guide was used to direct the interview. These concerns (data) were analysed in order to bring out the important issues that needed intervention. Fawcett et al., (2013: 30) argue that the core of analysing identified concerns is the analysis of those conditions that people, or the target population, label as community problems.

In this study, the information provided by school health nurses in respect of their experiences and problems in the school environment, and information provided by others such as the school health coordinator, school teachers and school adolescents regarded as the problems faced by school health nurses in performing their role (as defined in this study) through semi-structured interviews and focus group discussions were analysed. The research questions provided the

guide for the analysis. Details of analysis procedures are provided in the research methodology chapter.

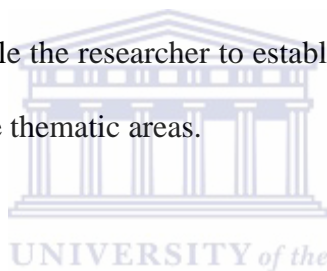
## **4.2 PRESENTATION AND DISCUSSION OF THEMES AND SUB-THEMES**

The findings are presented in a thematic form with concomitant sub-themes that constitute the core of the data content. The results are presented in tabular format. The findings are presented in four sections. The findings from each set of interviewees i.e. school health nurses themselves, school adolescents, school teachers, and school health coordinator were presented concurrently in order to properly situate the experiences and challenges of school health nurses regarding their role in the school environment. The researcher related the strands of their respective opinions or views on each question, to one another. The themes and subthemes are narratively depicted so as to enable the researcher to establish a link between them, and what had previously been done in those thematic areas.

### **4.2.1 SECTION A**

#### **4.2.1.1. Findings relating to the first research question “What is the role of school health nurses in the secondary school environment of Ijebu Ode local government area?”**

School health nurses were asked to comment on their role expectations in the school health nursing service. Their responses were generated through individual interviews. The analysis shows similar responses to the question.



**TABLE 4.1: THEMES AND SUB-THEMES FOR RESEARCH QUESTION ONE**

Theme	Sub-themes
Awareness of roles and responsibilities	Poor awareness of roles and responsibilities Poor role preparation
School nurses' activities in the school environment	Provision of health education Treatment of minor ailments Provision of referral services

Two themes emerged from the question about the role expectations of the school health nurse. The first one was: awareness of roles and responsibilities, with sub-themes: poor role definition and poor preparation toward taking on the roles and responsibilities of a school health nurse. The second theme was: the school health nurse's activities in the school environment, which had health education, and diagnosis, treatment of minor ailments and injuries and referrals as sub-themes.

**Theme 1.1: Awareness of roles and responsibilities**

Each of the school health nurses concurred on the fact that after working for a time in a medical setting, they were immediately sent to the school environment to begin functioning as a school health nurse without having a pre knowledge of this. This was contrary to their expectations of working in the hospital environment. Understanding role expectations is vital to an individual's successful performance in any particular role. Turner in Andrew and Richard (2015: 379) defines role as "a dynamic aspect of a particular status [that] designates the way in which the status should be performed." Turner in Andrew (2015: 379) submits that a set of behavioural expectations are associated with the role players. These expectations could be part of one's



nature through unconscious assimilation or externally imposed, or both. In examining the interaction perspective on behaviours that constitute role, Turner in Andrew (2015: 379) further suggests that the dynamics of interaction give rise to role, and status and positions emerge to place role in a social organizational framework. Following from the above, four types of role were identified which are: basic role, position/status role, functional group role and value role. According to Turner in Andrew (2015: 379), basic role is associated with gender, age and social class identities. These roles form the essential foundation in a wide range of situations as they modify and control access to other kinds of role. Position/status role is linked to positions in organisations and formally organised groups. Occupational role is subsumed in this role, which is modified by the basic role. Functional group role arises as a result of unpremeditated emergence of behavioural patterns during which an individual acquires situational identities. This role is not clearly defined i.e. it is not formalized. Roles such as ‘counsellor’, ‘leader’, ‘mediator’ come under this category. Value role also emerges spontaneously but is attached to positively or negatively valued identities such as ‘hero’ and ‘villain’. The school health nurse’s role is captured under both position/status role and functional group role. The occupational roles are the well-defined ones which they routinely fill, while the functional ones emerge as a result of their interaction with adolescents whose sexual reproductive health needs transcend the formalized aspects of the school health nurse’s role. Adolescents’ decision-making in reproductive health requires guidance from school health nurses, thereby placing them in a role situation that is not formalized. The National Association of School Nurses in Magalnick and Mazyck (2008: 1053) delineates seven main roles and the associated responsibilities of school nurses:

- Provision of direct care to students. This includes caring for students who have acute illnesses and injuries, and management of students with special health care needs. The responsibilities entail assessment and treatment permitted by the professional nursing

practice. The school nurses are expected to communicate with parents on the health needs of their wards. Appropriate referrals are also included as part of their responsibilities.

- The leadership role is expected of school health nurses. It is incumbent on them to provide guidance to the staff and students in the school environment on how health matters should be handled. They develop plans for responding to emergencies and disasters and for handling information with the necessary confidentiality.
- School nurses carry out screening as a form of preventive measure or means of minimizing the effect of any imminent health challenges in the school setting. The students with potential health problems are identified for early and prompt attention.
- A healthy school environment is necessary to ensure optimal functioning of the students in all respects. The school health nurses ensure that the environment is safe, and conducive to learning and other purposes aimed at developing the capacities and capabilities of students by monitoring immunisations, controlling communicable infections and reporting early any communicable diseases, as required by law. The safety of the environment is facilitated through safety monitoring of the playground, maintenance of adequate ventilation and advising students against harmful activities.
- The school health nurse engages in health promotion by providing health education in the form of health information to individual students and groups of students. Their input into health education curriculum development at the school is an essential element. They may provide programs on the basis of prevailing health issues and conditions. The topics that health education may cover include: nutrition, exercise, oral health, prevention of sexually transmitted infections, and other infectious diseases.
- School health nurses play a leadership role in the schools' health policies and programmes. Their expertise is required in the direction school health will follow, in

that they develop and evaluate school health policies on health promotion and protection, chronic disease management , coordinated school health programmes, and infectious disease prevention, among others.

- School health nurses are expected to be the link among groups: school personnel, health care professionals, family and the community. They ensure collaboration among all the stakeholders, and engage in proper communication regarding new developments and health policies to the concerned people. They interface with other health professionals to ensure a holistic provision of health services to the students and other beneficiaries.

In a study by Lightfoot in Broussard (2004: 77) to generate information on the school nurse's role in meeting the health needs of children, four main roles were identified: safeguarding the health and welfare of children, acting as confidante for children and adolescents, health promotion, and family support. These identified roles, in the main, are related to the position of NASN on the role of school nurses.

The two sub-themes that emerged from this theme are poor awareness of roles and responsibilities, and poor role preparation.

#### ***Sub-theme 1.1.1: Poor awareness of roles and responsibilities***

Poor awareness of roles and responsibilities may lead to role confusion, which is likely to lead to poor performance and lack of motivation. Where there is no clear understanding of one's expectations in the position one is occupying, the individual may lack the commitment and willpower needed to get the job done, which may ultimately lead to frustration. The consequence may well be low productivity. The thoughts and feelings, as expressed by the school health nurses, concerning the roles and responsibilities, had an undercurrent of frustration. These assertions were well captured in the interviews:

*“I joined in 2007, and was employed by the Ministry of Health. I was formerly sent to... then I was in charge of three schools: one secondary, and two primary schools. There was no preparation for the job. They just sent us to school to start. The thing affected nearly every one of us.”* (School 1 Nurse)

The enormity of the roles and responsibilities of the school health nurse was underestimated by most of the school nurses before joining the school nursing service. They had thought that school nursing demands were light. The following statement underscores the disappointment experienced by one school health nurse:

*“My feeling when I was posted the school... Well...laughter... I felt somehow, reason being that when I was at the NPI, I thought school health nurses would just sit down doing nothing. It was when I got here that I realised that what they do was not a small thing. Personally, what I do here is more than what I was doing before coming here.”* (School 8 Nurse)

The above impressions were corroborated by some other school health nurses in different locations.

*“I was among the people that were offered jobs. I have been working here for the past 7 years. We were told specifically before the interview that the health workers they were going to employ would be posted to the schools. That was when the school health programme was established. After employing us, they just sent us to school to be functioning as a school health nurse.”* (School 3 Nurse)

*“When we were employed, we were told that we would be working in schools to address the health conditions of students instead of going to hospital. And they posted us to schools from the Ministry. The teachers and students have been the beneficiaries of my services.”* (School 4 Nurse)

*“When I heard about the employment opportunity, I obtained the form, and attended the interview. I was among those that were finally selected. I was posted to the school immediately after I was employed by the Ministry of Health. When we were coming, they told us in the Ministry that we should give minor treatment to the students.”* (School 5 Nurse)

*“We were sent to the school health service right from the Ministry. I did not work in any other place. I felt somehow bad because I thought I would get to the setting where I could put into practice what I was taught at nursing school. Haah...well, there was no preparation. They just*

*asked us to go to schools. When we started, no support, but somewhere, along the line, they would just call to tell us about our responsibilities...” (School 6 Nurse)*

Even though the school nurses claimed they had the information about where they were going to be placed after being appointed, the knowledge and understanding of what the school nursing services entailed was poor, hence their bewilderment over the situation they found themselves in their postings. Their reactions are not surprising, in the light of the fact that there was no proper orientation regarding the demands of the job. Campbell (2009: 118) observes that a new school nurse feels welcome and motivated in his or her new work environment if s/he is socialized, understands his or her new role, and has people around who can answer questions or help make the necessary clarifications. Where roles are not clarified and well understood, there may be role ambiguity, in which case the school nurse professional may not be able to separate his or her jurisdiction from that of others. This may affect the nurse's job satisfaction and job performance (Smith, 2011: 182). Felton and Keil, (1998: 5) in a study of perceptions and visions, found that role confusion was experienced by school nurses as a result of the complex and changing health needs of students and the lack of consistency between school districts. Evolving customer needs creates a situation of uncertainty in an organization when the inputs, processes, or outputs of work systems cannot be predicted. Adolescents' reproductive health needs are getting more complex in view of their exposure to danger, and risky behaviours, which can be traced to technology advancement and globalization. Guiding adolescents in decision-making on reproductive health is an emergent or adaptive role of school health nurses, as this was not part of their heretofore formalized role. Formalized work roles use job descriptions to spell out the tasks that people have to perform, the procedures that they have to follow and the required standards (Griffin, Neal & Parker, 2007: 329).

### ***Sub-theme 1.1.2: Poor role preparation***

This sub-theme also emerged as being intricately connected with the roles and responsibilities of a school health nurse. The hallmark of someone who fills a role entrusted to them successfully is his or her ability to function in the delineated role effectively. Role preparation is highly essential, and is part of the set of preparatory activities for an incumbent in their new work environment. An orientation or mentoring programme ensures that competencies (and other aspects of baseline knowledge) which are not acquired (or consolidated) in training and study at colleges/ universities, are imparted to the new worker. Role preparation entails getting new employees to have a good foundation by having effective relationships with the organisation and other workers, and being well grounded in the demands and nuances of the job (Hootman, 2006: 1073). The National School Health Policy of Nigeria (FMOE, 2006a: 28) recognizes that school health programme activities are highly technical, hence the need for the acquisition of appropriate knowledge and continuous skills development of the school health nurse. The policy document further reveals that adequate machinery should be put in place for the capacity-building of school health nurses, and that this should be through pre-service and in-service training (FMOE, 2006a: 28).

School nursing is a specialized area of nursing which requires elaborate preparation (NASN, 2011: 2). The National Association of School Nurses recommends that a professional school nurse should be licensed as a registered nurse and hold a baccalaureate degree from a university. In Nigeria, the school health policy does not emphasize attaining a baccalaureate qualification. However, the registered nurse licensure is the minimum qualification expected (FMOE, 2006a: 28). This was attested to by the school health coordinator while discussing school nurses' qualifications in her response:

*“Of course, they are professional nurses, so some of them attended Schools of Nursing while some of them are attending Universities doing nursing programmes. Some of them have additional qualifications like midwifery, psychiatry, public health and so on. The minimum professional preparation is a registered nurse certificate. That is the minimum that we have.”*

(School health coordinator)

The school health nurses conceded in their responses that they were poorly prepared for the role of school health nurse. Besides the basic nursing and midwifery training they had acquired, there was no pre-service orientation programme aimed at sharpening their knowledge and skills in handling the responsibilities expected of the school health nurse:

*“After employing us, they just sent us to school to be functioning as a school health nurse.”*

(School 3 Nurse)

*“Well, there was no preparation. They just asked us to go to schools. When we started, no support.”* (School 6 Nurse)

*“I was posted to the school immediately after I was employed by the Ministry of Health.”*

(School 5 Nurse)

*“I was posted to the Local Government, NPI section, but after some time, they later decided that we should all be posted to schools.”* (School 8 Nurse)

Harvey in Shirley and Firmin (2009: 153) suggests that a new school nurse just entering the school nursing service should have his or her perspective changed from that of acute setting which emphasizes disease and injury to a public health model that entails preventive health strategies. This can only be achieved when there is adequate acquisition of skills that are specifically descriptive of other professionals. In a study conducted by Banks, Roxburgh, Kane and Lauder (2011: 3567), the findings show that newly qualified nurses face many challenges as they take on the role of qualified professional. The nurse respondents in the study concurred that skills and knowledge acquisition, and being a functional member of the team were preminent in their expectations as they adapted to their professional role. Bower in McCloughen and O’Brien (2005: 279) indicates that new professionals tend to learn much about their role and experience, and advance in their role if they enjoy the benefits of

mentoring. The need for school nurses to be prepared was emphasized by the teachers, and even the adolescent students:

*“If the Ministry of Health has... like we teachers, we have our own curriculum, they have theirs, objectives/goals that they set, and these are the things that the nurses are supposed to do within the school setting. Others would know that they are actually carrying out their mandate. There will not be an unnecessary overlapping that might cause friction between nurses and teachers. Teachers should know their job and nurses will also know their job.”* (School 1 teacher)

*“What I think, generally, the government should be giving the school nurses seminars and workshops to update themselves so that they would not be out of touch with development. In fact, this is applicable to all disciplines, teaching inclusive. If you have been on the job, and you don't go for seminars, workshops, you just find that you are out of touch.”* (School 2 teacher)

The excerpts from the school teachers' responses are a reflection of inadequate preparation for the role the school nurses have to perform in the school environment. Filling a role appropriately can only be achieved by adequate preparation. In a study on exploring the role of nurses in primary care and nurses' level of preparedness, the findings show that novice nurses should be well prepared for a primary care role in contrast to an acute care setting orientation, as a result of preceptorship and mentorship programmes. This, they say, will enable them to perform well in their role (Ali, Watson, & Albutt, 2011: 304).

*“The nurse does not know how to explain things.”* (School 2 adolescent 3)

*“At times, she might be angry, she should try to comport herself.”* (School 7 adolescent 4)

The opinions of the two school adolescents lend credence to the fact that there was no adequate preparation in training for skills needed in meeting adolescents' expectations. Adolescents' tendency toward independence and their need to assert themselves could set them on a collision course with the school nurse, who may not be well prepared to handle the more challenging adolescents. The anger may also be a function of burnout the school health nurse



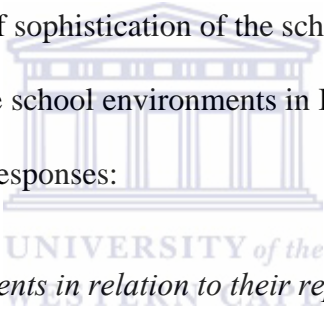
experiences in the course of discharging his or her duties. Freudenberger in Landa and Lopez-Zafra (2010: 52) found, in a study carried out among young volunteers working in a detoxing clinic, that after a while they felt exhausted, they became easily irritated, and had developed a sceptical disposition toward their clients. Landa and Lopez-Zafra (2010: 52) submit that work related stress could prompt anger and irritation to surface in nurses, and this stress emerges from the personal and professional challenges nurses face, such as the specific nature of tasks, their clients, poor task clarity, lack of autonomy, high pressure, and lack of support from superiors. They further argue that nurses should be able to manage their emotions and recognize those of other people.

The inability of some school nurses to explain issues and teach students correctly can be traced to low levels of readiness and preparation for the school health nurse's role. The role entails skilful health education techniques that will work toward effecting positive change in behaviour. Inability to perform this role effectively may block the body of knowledge needed to bring about those positive behaviours. In a study conducted to compare the teaching skills of school nurses and classroom health education teachers, where the teaching is aimed at reducing risky sexual behaviours among students, the results suggest that classroom health education teachers are more skilled in imparting knowledge than school nurses are. Classroom health educators, it is suggested, are aided by presentation of materials. In addition, their comfort levels are higher than that of school nurses. On the other hand, school nurses performed well in instruction involving hands-on skills, and the students taught by them were more likely to report significant positive and sustainable changes in areas of sex-related cognitive factors (Borawski, Tufts, Trapl, Hayman (2015: 193). The import of these findings is that school health nurses should be well grounded in health teaching skills which will help in conveying, in a clear and concise manner, whatever message they set out to teach adolescents. Lack of

confidence, inability to work independently and lack of communication may account for the poor role performance of school nurses (Ali, Watson & Albutt, 2011: 305).

### **Theme 1.2: The school nurse's activities in the school environment**

The second theme that emerged is the school nurse's activities in the school environment. These activities constitute the substance of the actual role they play in the school setting. The activities are a true reflection of what school nurses actually do. In most cases, these are negotiated and might not necessarily follow the patterns as indicated by the National Association of School Nurses (Magalnick and Mazyck (2008: 1053) and national school health policy directives (FMOEa, 2006: 12). It also depends on the prevailing health needs of the school adolescents and the level of sophistication of the school health nurses. The activities of the school health nurses across the school environments in Ijebu Ode Local Government Area are similar, as evidenced in their responses:



*“We give health education to students in relation to their reproductive system. Then, how they can prevent unwanted pregnancy, sexually transmitted diseases. We tell them about menstrual care, we tell them things to be expected as they are growing up, you know, the other time I said they are transforming from childhood to hmm... ; ours is just to go there and give the health talk.”* (School 1 nurse)

*“I do give treatment for minor ailments when they injure themselves because they do go to field for sports.”* (School 8 nurse)

*“Hmmm... Those girls, most of their complaints are dysmenorrhoea. Some do complain of headache or feverish conditions, abdominal pain. That abdominal pain is in two forms – we have some-minor abdominal pain, and other from dysmenorrhoea.”* (School 4 nurse)

The activities are school health policy-driven even though these are below the expected threshold required for holistic school nursing services. The school health nurses' activities are contextually determined as they arise from community and school profiling. The Royal College of Nursing (2014: 2) sets out the national priorities for children and young people's health,

which accounts for a major part of the school nurse's role. These include: accidents, alcohol and drugs, smoking cessation, mental health, obesity, nutrition and physical activity, sexual health and teenage pregnancy, safeguarding and promoting young people's welfare, immunisation, supporting young carers. There are variations in the priorities based on the varying nature of particular community profiles, of which an integral part is the school profile. In another study on best practices in school nursing in Washington, the staff model with recommended guidelines for delivering health services based on the nursing care needed by the student population was used in determining the activities of the school nurses. The school activities include emergency services, health education, and health assessment (Thronson, 2006: 5). School nurses' activities have both general and specific aspects. The general aspects cover a range of interventions in health promotion, while specific ones are peculiar to the dominant health challenges in a given environment. In Egypt, sex education is an emerging (adaptive) role owing to the inclusion of sexual health on the health agenda (Farrag & Hayter, 2014: 50). A study in Massachusetts on the role of school nurses reveals the emphasis on the need for school nurses to identify adolescent students who may be victims of commercial sexual exploitation, by helping an exploited girl move from invisibility to the point at which they can be ensconced in a place of safety and support (Grace, Starck, Potenza, Kenney, 2012: 410). The school nurses among Latino youths have been able to identify the influence of cultural barriers on adolescents' seeking mental health services. Suicidal tendencies are prevalent in this social setting, as are anxiety-related problems, depression and drug use. The school nurses are expected to understand and be able to decipher the cultural meaning of mental health issues, and how this could influence their health-seeking behaviour (Desocio, Elder & Puckett, 2008: 146). Among Queensland school nurses, health promotion, illness prevention and/or early intervention strategies and referrals are high priority intervention areas for school nurses (Smith & Stepanov, 2014: 42).

The three sub-themes that link with the main theme are health education, interventions in minor ailments, and referrals.

***Sub-theme 1.2.1: Provision of health education***

Extracts from the responses of school nurses, teachers and adolescents, and the school health administrator show that school nurses provide health education on sexual issues, malaria, and personal and environmental hygiene.

*“Health education. I counsel aside health education. Depending on the circumstances that occur. At times, if there is any change, for example, like I am in girls’ school now, for a child that is in the school to start menstruating, if the child comes to us, we give sex education, we enlighten the child there is nothing to be afraid of that for blood to be coming.”* (School 3 nurse)

*“Hmm... We health educate them, on that of menstruation, once there is menarche, the first time ever, they may believe they have contracted toilet diseases, or lacking good nutrition.”* (School nurse 4)

*“I do give health talk. Health talk would be given during an important occasion in the school especially among the student sub-groups such as jet club. Health talk centres mainly on their personal hygiene.”* (School 5 nurse)

*“We only give reproductive health talk, especially during inter-house sports. During this occasion, I always caution female participants not to go to an obscure place, to avoid being raped.”* (School 5 nurse)

*“She focuses on the students ...like... Maybe if they have Malaria, and so on like that.”* (School 1 teacher)

*“He used, I think, give ... an advice that relates to the opposite sex. The maturity, signs of puberty, he used to give them talks on those things.”* (School 2 teacher)

*“In the area of health-reproduction, they are very useful to us especially when these students are on menstrual period. Most of the students feel menstrual pain. When we have something like that, we direct them to the school nurse, and they help them in their bay to monitor them.”* (School 3 teacher)

*“Actually, I don't really know but they normally talk to them about their period. I am talking about their menstruation, and how they can take care of themselves.”* (School 1 teacher)

*“They educate us on dangers associated with not keeping ourselves healthy. They speak to us about personal cleanliness.”* (School 1 adolescent 2)

*“She does advise us to stay away from the girls to avoid pregnancy.”* (School 3 adolescent 2)

*“Vaginal infection...”* (School 3 adolescent 3)

*“Cessation of menstruation...”* (School 3 adolescent 5)

*“Mainly, menstrual pain...”* (School 3 adolescent 7)

*“Like telling us about hygiene in the assembly hall for junior school...”* (School 4 adolescent 2)

*“But, he used to come to one or two classes where he will check their nails and their feet, and teaches about bacteria or infections.”* (School 2 adolescent 5)

Health education is a critical aspect of preventive health services as it aims at building the self-awareness which is needed for the motivation, skills and confidence applied in improving health. Health education also facilitates the dissemination of information about socio-economic and environmental factors that influence health. Information on individual risk factors and risk behaviour, and the utilization of the health care system is also communicated to individuals (WHO, 2012: 12). Health education is an essential component of primary health care. The World Health Organisation, in Aigbirem, Alenoghena, Eboreime and Abejegah (2014: 35) defines primary health care as “essential healthcare based on scientifically sound and socially approved methods and technology made universally accessible to individuals and families in the community through their full participation at the cost the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination”. Other components of primary health care include: promotion of food supply and proper nutrition, adequate supply of safe water and basic sanitation, maternal and child health, immunization against the major infectious diseases, prevention and control of locally endemic diseases, appropriate treatment of common diseases and injuries, and provision of essential drugs (Adeyemo, 2005: 149). Health education is an integral element of health promotion. The two terms are often used interchangeably. They are, however, conceptually

different from each other in meaning (Alexandropoulou, Sourtzi and Lalokerinou, 2010: 263). Other elements are health protection and prevention (WHO, 2012: 14). Health promotion activities are aimed at improving well-being, and it constitutes the core of primary level of prevention. There are three levels of prevention commonly found in nursing practice: primary prevention, secondary prevention and tertiary prevention (McEwen & Nies, 2011: 6). Primary prevention entails the activities that are directed at preventing a problem before it occurs by altering susceptibility or reducing exposure for susceptible individuals. It is bi-dimensional in nature as it comprises health promotion as well as specific protection. Health promotion activities are directed toward well persons by increasing their awareness of proactive measures that can be taken in order to continue to stay healthy and these include promotion of good nutrition, effective exercises, low intake of cholesterol, and moderate sexual activities. The specific protection component consists of efforts toward reducing or eliminating risk factors, and these include measures like immunization and water purification. Secondary prevention covers a broad range of activities related to early detection and prompt intervention in the early stages of disease, especially during the incubation period. Those who are exposed to risk factors are targeted. The following are examples of secondary prevention: mammography, blood pressure screening, scoliosis screening, and Papanicolaou smears. Tertiary prevention targets the people who have experienced disease or injury and focuses on limitation of disability and rehabilitation. Tertiary prevention aims at decreasing the chances of the condition worsening (McEwen & Nies, 2011: 7). The health promotion approach has been found to be instrumental in young people making informed choices regarding health-related behaviours such as sexual health, smoking, alcohol, and other drug use, and mental health (WHO, 2009).

Sex education was a form of health education given to the adolescents in this study, regarding their sexual health.

*“Mostly, I give health education. Health education on personal hygiene, on sex in the sense of prevention of unwanted pregnancy, and aside that, we notice that there are some students among them whose libido is very high. We advise them, sometimes, we invite their parents, and we discuss with them.”* (School 7 nurse)

*“Hmmm... I think menstruation. Since the students are mainly girls, they experience a lot of things, they are in a puberty stage, and menstruation is one of those things they experience.”* (School 4 teacher)

Sex education reflects a synthesis of educational experiences that could facilitate the acquisition of knowledge needed for sexual health, and also for gaining necessary skills, developing motivation and personal insight to act on the knowledge in order to enhance sexual health (McCall & McKay, 2004: 596). There is overwhelming evidence that attests to the relevance and importance of health education in achieving optimal levels of health among school adolescents. In a study in Soroti, Uganda on the effect of health education on abstinence among in-school adolescents, the findings show that the percentage of students who were sexually active was reduced from 49.9% (123 to 287) to 11.1% (31 to 280) in the intervention group, while no significant change was recorded in the control group. The students in the intervention group were more inclined to discuss sexual matters with peers and teachers. The students claimed that the abstinence stemmed from their ability to make a rational decision, as opposed to the punishment model that was not as productive (Shuey, Babishangire, Omiat & Bagarukayo, 1999: 411). Another study that underscores the vital importance of sexual health education was that of impact assessment of the school-based sex education program amongst adolescents. The findings reveal that sex education influenced the needs perception and the knowledge of students about STDs and the methods of prevention. The optimum days for conception to take place became known to more students after the training, and positive attitudinal change was observed in the area of myths associated with masturbation (Thakor & Kumar, 2000: 551). Esere (2008: 120) reported the outcome of a study on the effect of the sex education programme on risky sexual behaviour of school-going adolescents in Ilorin, Nigeria.

There was a significant difference between the intervention and control groups, in risky sexual behaviour. The intervention group reported lower incidences of risky sexual behaviours. On personal hygiene, the findings of the study on the effects of food safety education on adolescents' hand hygiene behaviours, and how the stages of change were affected are germane here. The study reveals that the most important factor that influenced proper hand-washing was self-efficacy which was achieved through health education. After the food safety education, the middle school adolescents who were in the stages of pre-contemplation (11.1%) and contemplation (88.9%) showed significant progress toward the action stage (Kim, Pai, Kang & Kim, 2012: 169). The effects of peer-led health education was made manifest in a study on intervention to improve in-school adolescents' cigarette smoking related knowledge, attitudes and behaviour in a North-West Nigerian State; there was an increase in the mean knowledge score of respondents from 61.24 before intervention, to 92.31 after intervention. Here too, the findings demonstrate that in the pre-intervention group, the proportion increased from 64% to 91%, regarding the participants leaving a place where cigarettes are being smoked, after an intervention (Mansur, Abubakar, Mansur, Aminu & Balarabe, 2014: 485).

Delivering health education requires that school health nurses be well prepared for this task. Even though they claimed that it is a component part of their activities, extant research shows that the health education may not be as well presented and accurate as it might be, and that it may not produce the desired outcome. In a study carried out by Goodeve which was reported in Whitmarsh (1997: 35), three school nurses indicated during an interview that they experience low levels of confidence when they are educating on HIV/AIDs, and that they needed supplementary knowledge and training before teaching young people in this subject area. In the same vein, Whitmarsh (1997: 38), commenting on the outcome of his study on school nurses' skills in sexual health education, said that it should not be assumed that school nurses have the skills necessary to teach sex education effectively. Alexandropoulou, Sourtzi and



Lalokerinou (2010: 263) reveal in their study that school nurses engage in health promotion activities based on the way they understand these. The import of this is that what they practise is not evidence-driven, and they may not be able to communicate the right messages and knowledge, hence the need to update their knowledge and skills. In a study done among the United Kingdom's school nurses regarding sexual health education, the findings show that even though the school nurses have adequate general knowledge of the topic, their lack of effective teaching methods was evident in the areas of sexually transmitted infections and emergency contraceptives (Westwood & Mullan, 2006: 352). In a similar finding of another study on preparation of child health nurses, the nurses claimed that delivering sexual health education was part of their role, but they all agreed that they did not have sufficient knowledge of sexual health to ensure effective delivery of this area of sex education (Johnston, 2009: 845).



***Sub-theme 1.2.2: Treatment of minor ailments.***

This is another sub-theme that emerged from the main theme. This constitutes one of the essential components of primary health care (Adeyemo, 2005:149). Minor ailments are defined as conditions that will resolve on their own, and which require little or no medical intervention (BCPA, 2013: 1). Minor ailments among school adolescents are likely to result from the school environmental conditions and hazards to which students are exposed. Some of the minor ailments include injuries resulting from playground activities, malaria, menstrual pain and abdominal pain. The responses from the range of participants lend credence to this assertion:

*“I do give treatment for minor ailments when they injure themselves because they do go to field for sports.”* (School 8 nurse)

*“Hmmm... Those girls, most of their complaints are dysmenorrhoea. Some do complain of headache or feverish conditions, abdominal pain. That abdominal pain is in two forms, we have some-minor abdominal pain, and other from dysmenorrhoea.”* (School 4 nurse)

*“She focuses on the students...like... Maybe if they have Malaria, and so on like that.”* (School 1 teacher)

*“Most of the students feel menstrual pain. When we have something like that, we direct them to the school nurse, and they help them in their bay to monitor them.”* (School 3 teacher)

*“We visit when we are sick.”* (School 3 adolescent 5)

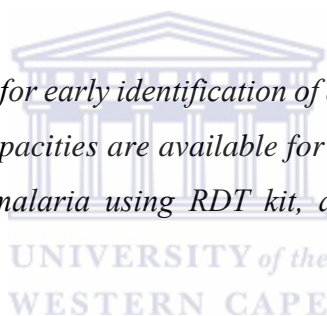
*“We have not been coming to her except for minor treatment such as malaria, abdominal pain.”* (School 6 adolescent 4)

*“We do go there when we fall sick.”* (School 3 adolescent 6)

*“Stomach ache...”* (School 7 adolescent 3)

Treating minor ailments appears to be one of the basic responsibilities of school health nurses to which they are fully committed. This was attested to in the responses volunteered by the school health programme coordinator.

*“Yes, their job description, one is for early identification of diseases and minor ailments which they do through screening, the capacities are available for them in the schools like screening for tuberculosis, screening for malaria using RDT kit, and some other minor ailments.”*  
(School health coordinator)



Early identification and treatment of minor illness is an essential activity undertaken by school health nurses, as they help in carrying out diagnosis of minor ailments such as malaria, menstrual pain, abdominal discomfort, and headache by using some basic equipment and drugs to treat these ailments. Students are exposed to a range of micro-organisms during farming and playground activities. School health nurses help in the screening of students for anaemia and infectious diseases.

Findings on diagnosis and treatment of minor illness align with the result of a study on problems and challenges of school health nursing in Akwa Ibom and Cross River States of Nigeria by Akpabio (2010: 17). These findings reveal the school nurse’s activities and their levels of involvement. Treatment of minor ailments recorded 100%; health education, 41%; referral services, 81.7%; and first aid, 16.7%. Nurses transitioning to school nursing services

are conversant with the acute care nursing model which is based on disease and injury (Smith & Firmin, 2009: 152). The import of this is that school nurses are clinically skilled to treat minor ailments. In a study on nurse management of patients with minor illnesses in general practice, the findings reveal that patients were very satisfied with both nurses and doctors, but that they were significantly more satisfied with their consultations with nurses, in addition to the fact that patients seen by nurses were managed without any input from doctors (Shum, Humphreys, Wheeler & Cochrane, 2000: 1038). Nurses' skills and knowledge in managing minor ailments have really helped their clients by improving access to care and ensuring patients' convenience. This was demonstrated in a study which explored how nurse prescribing is being used for patients with respiratory conditions across the east of England. The findings show that nurses provided care on minor illness, and this enabled nurses to circumvent problems emanating from service provisions. The nurses involved in this care provision experienced job satisfaction as they were allowed to exercise their skill and expertise in managing patients with minor illness (Carey, Stenner & Courtenay, 2014: 1). Earlier, in a study on exploring patients' perspectives on pharmacists and nurses as independent prescribers, findings reveal that participants acknowledged the expert drug knowledge of pharmacists while nurses were highly regarded, accepted and preferred as prescribers with few concerns on the part of their patients (Hobson, Scott, & Sutton, 2010: 110). All of the above findings are a pointer to the fact that nurses, and by extension, school health nurses possess the knowledge and skills to manage minor illness as this constitutes the core of their competencies.

### ***Sub-theme 1.2.3: Provision of referral services***

Referral is the third sub-theme that linked to the school nurses' activities. This was indicated in the responses of some of the school nurses:

*“Challenges that I am facing...there was a...because I used to rush some people to General Hospital. There was a day a snake bit someone in the school, we had to rush that person to the hospital, and apart from that, there was a...”* (School 2 nurse)

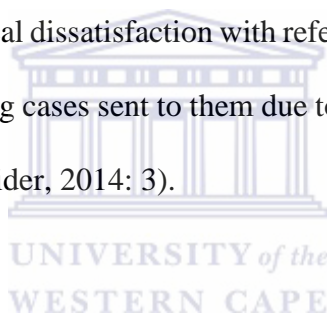
*“In this school, sometimes when we get to our school nurse, he gives only paracetamol. There was a day somebody got injured, he asked that they should rush the person to the hospital. There was not any first aid treatment. Everything is paracetamol or no drug.”*  
(School 2 Adolescent 1)

The responses of the school nurse were corroborated by one of the adolescents in the same school. Although some of them alluded to referral as one of their activities, the fact remains that in the face of inadequate supplies and provision of equipment and drugs, and the lack of adequate technical know-how, referral services become inevitable. The response of the school health administrator lends credence to referral as falling in the school health nurse’s domain of activities.

*“...we look at promoting health through inspection of school environment, food vendors that will have to comply with the laid down rules and regulations, the kind of food they bring whether it is in line with diet-nutrients that are needed by the students; and then referrals, follow ups, and home visits, aside that, they do some ad-hoc jobs like immunisation, deworming programmes and other duties assigned to them by the Ministry of Health.”* (School health coordinator)

Referral is one of the main responsibilities of the school health nurse (Megalnick & Mazyck, 2008:1053). It is firmly entrenched as one of the elements of primary health care (Adeyemo, 2005: 143). Referral is described as a transfer of responsibility for care from one level to another. This, in most cases, is from a lower level to a higher one where there will be better management of health challenges and conditions (Akande, 2004: 130). The significance of the above description is that referral is essential in the management of school adolescents, as it demonstrates the level of technical know-how of the school nurses in handling health conditions and the facilities needed for the implementation of care. The referrals will be more effective if the relationships and activities between the referral agent and referral centres are

harmonious, and the feedback system is well articulated (Eskandari, Abbaszadeh & Borhami, 2013: 229). Referrals take place when cases at hand are beyond what the health personnel can handle. Ademokun, Osungbade and Obembe (2014: 1076), in a study on states of implementation of school health programmes, found that the majority of participants agreed to the fact that they refer cases beyond their control to the local government health facility or state government health facility near them. In a similar study, the findings reveal that a large number of early adolescents were referred for physical examinations, nutrition, and mental health (Larson, Colborn & Engelke, 2011: 404). The success of referrals depends on how effective the activities at the referral centres are, and on their capability to address problems referred to them. The findings from a study on the implementation of the principles of primary health care in a rural area of South Africa reveal dissatisfaction with referral services, as the referral centres have not been effective in handling cases sent to them due to poor quality of care and lack of a support system (Visagie & Schneider, 2014: 3).



## **4.2.2 SECTION B**

### **4.2.2.1 Findings relating to the second research question: “What understanding do school health nurses have of how school adolescents make their decisions on reproductive health?”**

This is the second research question exploring the school health nurses’ knowledge and understanding of how adolescents make their decisions in reproductive health. Only one theme emerged in respect of this question and this centres on the issue of knowledge. Three sub-themes emerged from this main theme and they are as follows: inadequate knowledge of the concept of adolescence, lack of adequate knowledge of reproductive health, and poor knowledge of adolescent decision-making processes in reproductive health.

**TABLE 4.2: THEMES AND SUB-THEMES FOR RESEARCH QUESTION TWO**

Theme	Sub-themes
Knowledge and understanding of concepts and issues	Lack of adequate knowledge of the concept of adolescence  Lack of adequate knowledge of reproductive health  Poor knowledge of adolescent decision-making processes in reproductive health

**Theme 2.1: Knowledge and understanding of concepts and issues**

Having the requisite knowledge is critical for school health nurses' capacity to perform the role of guiding adolescents in their decision-making on reproductive health. The knowledge of how the adolescents make their decisions in reproductive health is a prerequisite for proper guidance and support. Knowledge is described as a belief which is regarded as the truth and allows for justification (Hunt, 2003: 100). Jong (1996: 106) delineated four types of knowledge:

- Situational knowledge

This entails knowledge about situations as they ordinarily manifest in a specified sphere of activity. Knowledge of problem situations enables the solver to filter important features out of the problem statement, and if necessary, to make an addition to information in the statement.

- Conceptual knowledge

This finds its expression in the unchanging form of knowledge about facts, concepts and principles that apply within a specified area. It functions as additional information that problem-solvers add to the problem, and which is used in solving a problem.

- Procedural knowledge

This contains actions or activities that are valid within a domain. It helps the problem-solver move from one problem state to another.

- Strategic knowledge

This kind of knowledge facilitates reaching the stage of finding solutions to a problem, by helping the individuals to organize their problem-solving process.

***Sub-theme 2.1.1: Lack of adequate knowledge of the concept of adolescence***

School health nurses need to understand this concept very well before they can offer quality services to the individuals classified as adolescents. The poorly articulated responses from the school health nurses offer some credible support to the notion that school health nurses knowledge of the concept of adolescence is inadequate.

*“Okay, adolescence is a transformation from child hmmm... What would I call those children? Child....Anything above children level hmmm... Till then, till adulthood. You know, after adolescence, we move to adulthood. That is why I used 22 years the other time. So adolescence is interval between the children stage and the adulthood.” (School 1 nurse)*

*“You can say a boy or a girl at the end of childhood, and the beginning of the adulthood. The age range is between 12 and 18 years. But when it comes to adolescent, they want to take that decision themselves, they don't want anybody to guide them.” (School 8 nurse)*

*“I may say adolescent is someone between the age of 13 and 18 years. There are some changes that happen to them physically and emotionally. It is a period of time when changes occur from childhood to... I don't know how to put it... It is a period of transition in a child. Let me say from childhood to adulthood.” (School 3 nurse)*

Their responses clearly show that the knowledge of adolescence as a concept is not sufficiently clear to help them understand the intricacies associated with the stage. They demonstrated a scanty knowledge of physical development as they could not fully describe the features comprehensively. There were inconsistencies regarding the span of the period. Some indicated that it terminates at 22 years while some said 19 years, and some others anchored it at 18 years. They also exhibited scanty and fragmented knowledge on transformation that takes place during adolescence. The description was bereft of hormonal changes which set up a series of

physiological actions that inform the changes leading to puberty. The school health nurses were unable to describe the cognitive development that takes place during this stage of life. This stage witnesses an upsurge in intellectual activities, and the ability of the individuals to engage in elaborate reasoning. The school health nurses mentioned freedom from control of their parents, and decision-making as two of the features of this stage. However, they fell short of explaining the rationale for such features. They were unable to situate adolescent developmental activities in any of the contemporary perspectives, such as psychoanalytic theory, psychosexual theory, cognitive theory and biological theory (Berger, 2005: 363). Sexual identity or role transition is one of the features of this stage. Identity development in adolescence encompasses sexual identity formation, sexual exploration (kissing, intercourse or dreaming), and these help in negotiation of autonomy and intimacy (Graber, Brooks-Gunn & Galen, 1998: 272). Development between male and female adolescents is disproportionate as the female adolescent grows faster than her male counterpart. The females exhibit primary sex characteristics (growth of internal sex organs), and then secondary sex characteristics (pubic hair, breast buds). There are growth spurts, the hallmark of which is menarche. Boys' primary sex characteristics are expressed in the form of growth of the testes and penis followed by spermarche, and finally, the growth spurt (Berger, 2005: 349). Adolescents' cognitive development finds its expression in complex abstract thinking. This is described by Piaget as formal operations i.e. a more advanced form of rationality with the attendant cognitive understanding of possibilities (Moshman, 2011: 8). Knowledge of the concept of adolescence falls under the heading of conceptual knowledge which is needed to empower school health nurses with further knowledge, especially of the procedural type. Adolescents constitute the pivot around which the school health nurses' activities revolve. Adolescence is a stage of transition; hence the school nurses' knowledge of it will assist in the planning of care for individuals in this stage of development. Lenz (2001:300) posits that adequate knowledge of



the concept will enable school nurses to provide anticipatory guidance, health promotion, disease prevention and health maintenance activities to adolescents. The knowledge obtained from training school may not be as comprehensive as to take into consideration all the necessary strands of the concept of adolescence. From their responses, all the school health nurses are registered nurses who possess basic qualifications in nursing with no additional training tailored toward the knowledge of adolescent development. A study on sexual health toward meeting adolescents' needs provide corroboration of this assertion. The findings reveal that the nurses working in key sexual health services tend to be registered nurses whose knowledge of adolescent development is limited, thereby leading to compromised quality of adolescent care (Metcalf, 2004: 40). Limited knowledge of adolescent development will lead to poor sexual health services. It has been demonstrated that school nurses with deficient skills in children's and adolescents' progress and problems were unable to accurately assess the developmental landmarks of adolescents (Reutersward & Lagerstrom, 2010: 160).

***Sub-theme 2.1.2: Lack of adequate knowledge of reproductive health***

Reproductive health is one of the areas where school health nurses should demonstrate their competence in view of their roles and responsibilities as enunciated in the National School health Policy (FMOE, 2006a: 12). Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its functions and processes (Roudi-Fahimi & Ashford, 2008: 4) The aggregate of responses of the school health nurses on what reproductive health is, reflect their poor knowledge and understanding of the issue. One school nurse responded as follows:

*"... Are you talking about the menstrual...?" (Long silence before answering) [School 8 nurse]*

The above response followed a lengthy pause. The silence (as shown above) indicates that the participant was stumped for what to say as an answer to what reproductive health is about. The

school health nurse indexed reproductive health as menstruation which is just a fractional part of the broader topic. The health talk on menstruation did not demonstrate that any knowledge concerning how the students could determine their “safe periods” toward guiding against unwanted pregnancies had been imparted, even though the nurses claimed that their health education activities have a sex education component. The focus on menstrual hygiene was further buttressed by the response from another school health nurse:

*“We tell them about menstrual care, we tell them things to be expected as they are growing up, you know, the other time I said they are transforming from childhood to hmm... ours is just to go there and give the health talk.”* (School 1 nurse)

Menstruation is a monthly shedding of blood from the female reproductive tract. It is part of the reproductive process of humans. The conflation of reproductive health and menstruation was an attempt to diminish what reproductive health represents. None of the school health nurses could give an apt description of reproductive health. However, some were able to demonstrate some of the vital components of adolescent reproductive health.

*“We give health education to students in relation to their reproductive system. Then, how they can prevent unwanted pregnancy, sexually transmitted diseases.”* (School 1 nurse)

In spite of this knowledge demonstration, a good number of them were less familiar with the components that adolescent reproductive health encompasses. This, in essence, shows that they have not been well trained in handling reproductive health issues. The responses of other school health nurses provide some support to the fact that they were not sufficiently knowledgeable about reproductive health issues:

*“... Reproductive health...I don’t think ... Hmm... “(No answer) [School 2 nurse]*

*“Reproductive health! (Remaining silent)... it is based on transition and changes that occur. It ... I can only say is just a stage of transition.”* (School 3 nurse)

*“Reproductive health...has a large definition...But I will quickly say is transformation from childhood to adulthood that is reproductive health in which the students will attain certain age to become adult. This reproductive issue, some will get to the period of their menarche.”* (School 4 nurse)

*“Reproductive health is about a male and female having relationship together to give birth to young ones. It is about how male and female relate to give birth to young ones.”* (School 5 nurse)

*“Reproductive health... reproduction is a means of reproducing... and health is a state of physical, social and mental well-being. If you are not healthy, you would not be okay sexually. So, reproductive health is health mixed with reproduction?”* (School 7 nurse)

The responses offered by the school health nurses were borne out of the meaning and understanding they constructed about what reproductive health stands for, and which invariably inform their activities regarding advice on reproductive health. Their utterances were by no means a reflection of what the conceptual knowledge denotes. Adolescent reproductive health is a sub-set of the field of reproductive health; it attracted global attention for the first time during an International Conference on Population Development in Cairo (Bearinger, Sieving, Ferguson & Sharma, 2007: 1227). The Conference directed its efforts toward promoting reproductive health, and by extension, adolescent reproductive health. Adolescent reproductive health focuses on addressing issues that could lead to ill health in adolescents, such as unwanted pregnancies, unsafe abortion, sexually transmitted infections including HIV/AIDS, and all forms of violence and coercion (Glassier, Gulmezolu, Schmid, Moreno & Van Look, 2006: 1595). Poor knowledge of the central issues adolescent reproductive health addresses will compromise prompt responses of school health nurses to health problems that need to be addressed. Findings from a study on nurse-midwives’ attitude toward adolescent sexual and reproductive needs in Kenya and Zambia (Warenius, Faxdelid, Chishimba & Musandu, 2006:119) show that the nurse-midwives frowned on activities involved in adolescent reproductive health, such as masturbation, contraception and abortion, while the nurse-

midwives with higher levels of education, and those who had received continuing education on adolescent sexual and reproductive issues, were more receptive and showed better understanding of the issues in adolescent reproductive health. The school health nurses' inadequate knowledge of adolescent reproductive health, as indicated in their responses, may result in sub-standard services rendered to adolescents in their respective school environments.

***Sub-theme 2.1.3: Poor knowledge of adolescent decision-making process in reproductive health***

This is the third sub-theme that emerged from the theme (knowledge). Adolescent decision-making is a complex issue. Their decision-making process is different from that of adults as it entails some risks. The pervasive aura of invulnerability leads them to experiment in many areas, especially risky ones, and their propensity to be adventurous is high. The responses of school health nurses on their understanding of how adolescents make their decisions demonstrated a lack of knowledge of this phenomenon:

*“Some of them make their decision based on discussion made with their friends or ....silence...”*  
(School 1 nurse)

*“Most of the time, they are always under the influence of peer pressure. They don't really communicate. They trust their own “circle”. They trust their own circle so much that they make decisions under the influence of peer pressure.”* (School 3 nurse)

The above responses did not reflect any understanding of the process of decision-making by adolescents about their reproductive health, but rather the influence of the peer group on decision-making was highlighted. Peer influence is one of the factors that modulates the decision-making of adolescents. The responses did not indicate the point or level at which peer influence will factor in during decision-making. Some segments of the excerpts emphasize that adolescents believe or have trust in their friends. No explanation for this was offered, thereby

leaving an impression that nurses were only aware of the influence of peers but did not understand why adolescents prefer placing their trust in a peer group, rather than their immediate family members. It has been found that one of the developmental tasks of individuals during adolescence is to disaffiliate from family and seek recognition among peers. Individuals who are from a dysfunctional family tend to be more susceptible to peer influences in their decision-making, and they tend to exhibit the same sexual behaviour their peers are associated with (Gordon, 1996: 561). The neuro-biological explanation for peer influence has to do with how the changes in the reward processing system affects adolescents' risk-taking. Peer-related stimuli sensitize the reward system to respond to the reward value of risky behaviours. The stimuli become activated as a result of a prolonged association with peers (Albert, Chein, & Steinberg, 2013: 1).

Further responses on how adolescents make their decisions on reproductive health show that the school health nurses are bereft of this knowledge. Some responses overtly demonstrated the accuracy of this assertion, while others were more subtle in that they attempted to provide plausible explanations:

*“The knowledge I have? I am not a counsellor, we have counsellor in the school.”* (School 8 nurse)

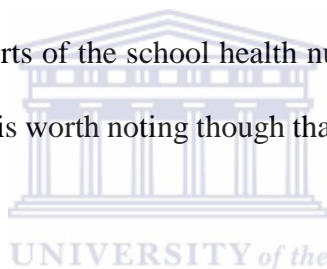
*“No answer. I don't think I know that.”* (School 2 nurse)

*“(Silence)... not really...”* (School 6 nurse)

The responses above showed that these school health nurses did not have an understanding of the adolescent decision-making process. This is a function of the fact that the role they ordinarily perform have to do with formalized tasks. As noted earlier in the discussion of the findings of this study, school health nurses undertake responsibilities that are more routine in nature. These are predictable tasks with which they have been identified. The role of guiding adolescents on their decision-making about their reproductive health falls within the domain of

adaptive prescription, which arises as a result of changes in technology, changes in the needs of consumers, and new trends in social and health concerns. There is a need to be responsive to adolescents' risky decision-making, of the kind which has led to an increase in mortality and morbidity arising from poor choices in their reproductive health. This has compelled the stakeholders and researchers to look beyond the regular provision of sex education and reproductive services. Though awareness of these matters may be heightened and the prevention of sexually transmitted infections through the provision of contraceptive materials may be addressed, these services do not actually address adolescents' decision-making, which is regarded as a vital life skill. Life skills are activities that help individuals to adapt, and cope productively with the demands and challenges of life (Moya, 2002: 1).

Some responses captured the efforts of the school health nurses to attempt to figure out what decision-making was all about. It is worth noting though that they could not get very far in this regard:



*“There are some students that are sexually... I have forgotten. This promiscuity of a thing... But then we need to call them to order on that... We explain to them... The effect of... preventive measure.”* (School 4 nurse)

*“I think decision-making is when someone says this is the way I want to do my things.”* (School 5 nurse)

*“Decision making...for one to make an informed choice, maybe after counselling or you to decide on what to do...eh...so... that is decision-making, you decide on what to do on your own.”* (School 7 nurse)

In the course of explaining the decision-making process among the adolescents in reproductive health, the responses of some of the school health nurses were confused. One may, for instance, find it difficult to see the link between decision-making and promiscuity in the response provided by one of the school health nurses. Some other responses may seem to relate in some way to decision-making, but they lack depth and focus. On the whole, these disjointed

responses are a clear demonstration of a lack of adequate knowledge of adolescents' decision-making processes about their reproductive health. Understanding the process of decision-making requires that the individuals are well grounded in a knowledge of the process. Decision-making entails choosing from a pool of options or alternatives toward a particular action, based on some given criteria or strategies (Wang & Ruhe, 2007: 73). Adolescent decision-making involves a lot of risks and outcomes, some of which may be devastating. A risky decision involves a choice whose end result may not be too positive for the decision-maker. There are some steps involved in the decision-making which, if properly followed, may have positive end results. Beyth-Maron and Fischhoff (1997:111) outline these steps as follows:

- Identify the possible options.
- Identify the possible consequences.
- Evaluate the desirability of each consequence.
- Assess the likelihood of each consequence, should action be taken.
- Combine everything according to a logically defensible "decision rule".

In essence, taking those steps demands cognitive activity which will enable an individual to ascertain the correctness of his or her actions. If possible, the decision-maker should identify all options. Limiting the number of options may put the decision-maker in a difficult situation. Accessing all possible options offers the advantage of comparing the consequences of each, against every other option. The desirability of the consequences is appraised. This has to do with what will be gained or lost if an option is chosen or embraced. The expected value of each option is the sum of the values or utilities of the consequences, giving due consideration to their possibilities. Cognitive processes entail how adolescents think. Adolescents' values are quite different from those of adults, which might account for the disparity in the decision-making between the two groups. In most cases, adolescents' values are disapproved of by adults, hence the conflict of ideas that pervades the relationship between the two. The decision-

making by adolescents in reproductive health requires that they possess some skills, but that they lack the evolved awareness of the fact that their decisions will not always bear expected consequences. The skills include complexity, thinking about possibilities, solving problems, and perspective-taking ability or relativistic thinking (Beyth-Maron and Fischhoff (1997:117). Complexity demands that the individual considers many segments or portions concurrently in an orderly fashion. These segments should be thoroughly checked as these activities enable one to unify diverse components of a decision. Thinking about possibilities enables individuals to think about what may happen now or in the near future should an action be taken or not taken. Solving problems is a means of formulating possible solutions to problems. The decision-maker devises and appraises decision options. Perspective taking finds its expression in the way other people view the decisions one takes, and whether these will gain the approval of the family, group or society. Decision-making cognition is an interplay of multiple factors such as portrayal of value, choice of response (which includes inhibitory control), learning, and socio-emotional dimensions (Blakemore & Robbins, 2012: 1184). Put differently, decision-making is complex and involves the input of sociocultural, economic, community, family, dyadic and individual influences, in addition to the cognitive processes involved. Adolescents' decision-making is subject to impulsivity and inhibitory control. An adolescent, especially an early or middle adolescent, is likely to engage in increased risk-taking owing to slow development of the brain regions necessary for cognitive control. But as an adolescent gets to eighteen years and over, there is a maturation of this brain region and this leads to a decrease in impulsive actions and concomitant increase in inhibitory activities (Blakemore & Robbins, 2012:1184). Over and above these processes, adolescents tend to show an inclination toward immediate gains, or fail to consider possible negative consequences. This is what enables them to make decisions that, in most cases, are risky. The reward-processing regions of the brain are highly sensitive to reward delivery and impulsive delivery, and this accounts for heightened



risk-taking in adolescence. Decisions that are taken in emotional contexts are situated in the above rationalization. Adolescent decision-making processes are also influenced by social context, and cost and benefit considerations. Adolescent females' decision making may be different from that of males because of their gender, which is socio-culturally constructed. Adolescent females are expected, in some cultures, to passively accept male overtures, which may affect decision-making outcomes. There is communication of values about appropriate sexual behaviour for males and females in every given society or culture, which impacts on the decision-making process of adolescents in reproductive health (Gage, 1998: 156). Social influences such as family, partners, and peers also determine the patterns the decision-making will take. Family influences are expressed in the form of parenting styles adopted. Building on Baumrind's work (1991) on parenting styles, Garcia and Gracia (2009: 101) used a two-dimensional framework of parental socialisation, namely demandingness and responsiveness, to expand and explain parenting styles. These parenting styles are: authoritative, which has both dimensions of demandingness and responsiveness; neglectful, which is bereft of both dimensions; indulgent, which is positive on responsiveness but deficient on demandingness; and authoritarian, that is demanding but not responsive. These parenting styles may influence the decision-making by adolescents. Adolescents from authoritative homes are aware that their parents are both supportive and expectant. Hence they may be a bit more careful, and may seek information on reproductive health issues which may help them in making decisions with positive outcomes. The influence of dyadic factors on adolescent decision-making in reproductive health is strong as sexual activity is negotiated. The status of the partners influences whatever decisions the respective individuals will take. The issue of gender factors is important here, especially in a context where male dominance or superiority is given prominence. The age of the partners can also influence whatever decisions will be taken within the relationship. It has been found that social influences such as context, norms, curiosity and

having an older partner with previous sexual experience tend to bear on adolescent decision-making in reproductive health (Fantasia, 2011: 48). Other influences such as economics, gender inequality and gender violence were reported to have some effect on adolescents' decisions about reproductive health (Wamoyi, Mshana, Mangi, Neke & Kapiga 2014: 88). Costs and benefits hold sway in adolescent decision-making. In addition to the above influences, adolescents do consider the perceived benefits against the consequences before making a decision (Reyna & Farley, 2006: 1). In the final analysis, the school health nurses' responses showed that they lack adequate knowledge of adolescent decision-making process in reproductive health. Hulton (2001: 48), while identifying factors associated with adolescent sexual decision-making suggests that nurses should demonstrate an understanding of the differences between adolescent and adult decision-making processes, and that their intervention strategies in this direction should include knowledge of growth and development. Aligning with this standpoint, Fantasia (2008: 88) argues that nurses should have a good grasp of the concept of adolescent reproductive decision-making, as this will be necessary in their efforts toward bringing about change needed to improve adolescents' reproductive health outcomes.

### 4.2.3 SECTION C

#### 4.2.3.1 Findings relating to the third research question: “What are the experiences of school health nurses on guiding adolescents in their decision-making about reproductive health?”

**TABLE 4.3: THEMES AND SUB-THEMES FOR RESEARCH QUESTION THREE**

Theme	Sub-themes
Skills and processes	Lack of adequate skills and understanding of processes for guiding adolescents in decision-making on reproductive health

#### **Theme 3.1: Skills and processes**

This is the only theme that emerged from the responses to the above question.

#### ***Sub-theme: 3.1.1: Lack of adequate guidance skills and understanding of processes for guiding adolescents in decision-making on reproductive health***

Some of the school health nurses claimed that they do guide adolescents in their decision-making in reproductive health. However, upon probing on how they provide the guidance, the responses given did not really indicate that they possess the skills needed for guiding adolescents in their decision-making about reproductive health, or that they understand what is involved in these guidance processes:

*“We used to tell them that it is transitional state, there are things you notice in your body. We encourage them to engage in personal hygiene, for those that are menstruating, we do tell them to be focused that there is time for other things later.”* (School 3 nurse)

The evidence from the above response concerning school health nurses' knowledge of the adolescent decision-making process in reproductive health has shown that they possess a sketchy knowledge of the subject matter. However, on their part, adolescents claimed that they have not been going to the school health nurses for guidance in their decision-making on reproductive health. This was captured in some of their responses:

*"We have not been seeking such guidance."* (School 2 adolescent 2)

*"None, we have not been going there for such guidance."* (School 2 adolescent 8)

*"We have not been going there to seek for such guidance on our reproductive health decisions."* (Other adolescents)

*"I don't know about other students but as for me, I have never been to them."* (School 1 adolescent 2)

*"I don't come here for advice, if I need advice, when I get home I seek it from my sister."* (School 7 adolescent 4)

*"As for me, I don't go there since I do not have any problem. If I have, I would first go to my mum, sister, and class teacher."* (School 3 adolescent 2)

These responses showed that school health nurses have not been providing guidance on adolescents' decision-making in any real sense. The guidance they purport to give is on other health issues such as personal hygiene, environmental hygiene, and menstrual hygiene in the context of general health education. This assertion was underscored by the teachers' responses:

*"They guide them on, most especially puberty stage because they have to teach them sex education."* (School 4 teacher)

*"On every Thursday, the nurses will come out to talk to them about their reproductive health. I think they are doing their best."* (School 1 teacher)

The first response above reflects an assumption which does not indicate the content and the process involved in guiding adolescents. Giving health education is also a form of guidance. However, the process of delivering health education by school health nurses is not clearly

understood and hence cannot be accounted for by the teacher. The responses of these teachers as to the activities of the school health nurse might be modulated by sentiments which may not reflect the true state of affairs. Guidance is a systematic activity which goes beyond talking to a group of students at one fell swoop. Guidance may come up either as an individual or a group activity, as both have their merits and demerits. The form in which the health talk they provide is delivered may make students lose interest; it may be dismissed as a routine lecture, or an attempt by nurses to justify their activities in the school system.

Some of the students even expressed confidence in their family members and their teachers for guidance activities. Their responses could stem from the fact that the school health nurses may not be behaving like true nursing professionals. Nursing professionals are expected to exhibit the traits that should command the respect of their clients. Some of these traits include competence and a patient-centred culture (Kieft, Brouwer, Francke & Delnoij, 2014: 1). Effective guidance can only be carried out when one is equipped with the right knowledge on the areas identified, and the appropriate skills required for this guidance. The services rendered by nurses should be patient-centred and not nurse-centred. This will enable nurses to render accountable quality care that will bring satisfaction to their clients. Further responses on the above question from the school health nurses showed poor articulation of what guidance entails:

*“Some of them make their decision based on discussion made with their friends or ... (Silence)”* [School 1 nurse]

The above response did not reflect that the school health nurse had a clear understanding of how to guide adolescents in their decision-making in reproductive health. What the nurse indicated was how one single factor (i.e. peer group) influences adolescent decision-making. The response did not explore how the process will be achieved. This resulted from an

inadequate knowledge of the guidance process and the subject matter. Responses from other school health nurses further show their lack of knowledge on the guidance issue:

*“That one comes under the counselling matter. You know, when I was telling you about how I do guide them under health, I made mention of menstruation, and under that, I do go into details concerning the boys because that is why we have some girls that... there is what we call VVF, when it is not the right time for them to have pregnancy, and because of that menstruation that has begun, when they do go about with boys or they have friends that do something of such, they would have to follow them and don't forget, I told you earlier on that some of them want to have independence, they want to do things on their own way. So, I do tell them, they don't have to follow those people and that whatever they were given by their parents, they should be content with it. Boys will tell them I want to give you money, and there are some logic they use in order to have intercourse with them, but when they have this sex education, they would know the implication if they should go into such act, they would quickly remember that Mummy nurse said we should not do this or that with boys. And definitely, when pregnancy sets in they won't be able to complete their education. Pregnancy is one of the hindrances to learning, so I do tell them that, and I have been guiding those concerning boys.”* (School 8 nurse)

*“Hmmm...I do that...whenever any of them comes to me, I would say they should let me know before taking any decision. Hmmm...okay... (long pause) Hmmm... I do tell them that...”* (School 2 nurse)

*“In that angle (sic), I sit them down to tell them the effects of their complaint, you know. If something of such should happen, you will be pregnant. So, the best solution is to ignore men or their call of that person, and make a special report.”* (School 4 nurse)

*“Some adolescents do receive health talk. Their principals, teachers, and parents should be involved in health talk. The school health nurses should be given a chance to talk to students once or twice in a week.”* (School 5 nurse)

*“Decision making...ehh... all we do here is health education, it is only God that guides but all we do is to health educate them. This is the right thing to do. These are the superstitions, don't do it, then you should be mindful of those people young are playing with the peer group, so they should not make friends with those people that would lead them astray that would say let us to go to a boyfriend, ours is to tell them, theirs is to take and put into practice. She should be mindful of what they wear, they should be content with what they have, anything their*

*parents give them, they should be content with because if you are not content maybe that boy or man has given her fifty naira some time ago, you know, the girl may think he wants to give her something else, and may fall a victim.” (School 7 nurse)*

The extracts above did not reflect the knowledge of guidance and its process in influencing adolescents’ decision-making in reproductive health. The responses indicated that the nurses had shortcomings regarding the task of guiding adolescents in their decision-making. Most of the responses were a function of the school health nurses’ individual experiences, especially those from an acute care background:

*“I used to lecture them because I have made...I used to give them health talk, I used to put them through. There are some that...most of them do not have knowledge about it. Hmm...the health talk focuses on diet food and nutrition, personal hygiene, adolescent, puberty and maturity stage, and for the girls, I give talk on genital and oral care.” (School 6 nurse)*

The above response shows that there is no clear pattern of guidance for adolescents by the school health nurses. The school health nurses tended to lump issues together. Reproductive health was not given much prominence in their responses. In a situation where topics or issues are conflated in the way the responses reflect, these issues may be treated or addressed superficially, with little or no impact on the adolescents that constitute the target group.

Guidance is an act of assisting individuals to achieve their social and personal aspirations by making them appreciate, accept and use their potential related to those aspirations (Jost, 2000: 73). Guidance, in most cases, entails helping adolescents in those areas in which they lack adequate capacity to make good decisions that affect their lives. Guidance aims at understanding one’s strengths, limits and resources, achieving maximum development of an individual, and addressing various challenges confronting an individual. The act of guiding uses certain information about an individual, and then harmonizes it with specific knowledge based on the expectations of the person (Borgen, 2002: 332). Decision-making in reproductive

health by adolescents is one of the challenges facing them as entity group and guidance is required for this. School health nurses, in providing guidance to secondary school adolescents, are expected to possess certain qualities. These may include awareness of self, sincerity, a caring disposition, knowledge and ability to interface with others effectively, especially adolescent students, and the ability to exhibit the trust needed for good guidance activities (Mwamwenda, 2004: 356). The author argues that knowledge as an attribute may only be derived from the combination of training acquired in that respect, and experience garnered over time as individuals play the role of guide. School health nurses need to be well equipped in acquiring skills needed for effective guidance, and acquire knowledge of the subject matter which forms the bedrock of the guidance activities.

There is a dearth of studies on how school health nurses guide adolescents in their decision-making on reproductive health. However, the findings of a study on guidance provided by school nurses, on internet addiction show that school nurses' abilities should be enhanced through a training programme (Ohk, 2005: 405). The poor knowledge of guidance exhibited by school health nurses in this study is consistent with the study on school nurses' perception of barriers to guiding families on weight-related health. The study identified lack of knowledge and lack of institutional support as factors militating against school nurses' effectiveness in this situation (Steele, Wu, Jenson, Pankey, Davis & Aylward, 2011: 128).

#### **4.2.4 SECTION D**

##### **4.2.4.1 Findings relating to fourth research question: “What are the challenges faced by school health nurses on guiding adolescents in their decision-making on reproductive health?”**

The responses to the above question from all the participants led to the emergence of three themes which are: mutual relationship, resources and professional development. Each of the



themes yielded one sub-theme each: poor mutual relationship, inadequate physical, material and financial resources, and inadequate knowledge and skills development programmes respectively.

**TABLE 4.4: THEMES AND SUB-THEMES FOR RESEARCH QUESTION FOUR**

Theme	Sub-themes
Interpersonal communication	Poor communication between school health nurses, and students and teachers
Resources	Lack of adequate material, physical and financial resources
Continuing professional development	Inadequate knowledge and skills development programmes

**Theme 4.1: Interpersonal communication**

This is the kind of communication that is reciprocal in nature, and it allows for building of confidence and trust among partners. It is desirable in the health context as it allows for collaboration, mutual relationship and cooperation between the clients and care-givers. This communication is therapeutic in nature as it promotes and enhances the process of healing or creates an enabling environment for the effective guidance of clients. Communication between partners is known for being characterised by mutual trust, regard, sincerity and commitment, and also partaking in common aims and concern (Freyder & O’Toole, 2000: 19). Interpersonal communication is critical to relationship building in that it encourages openness and sincerity of purpose of all parties, with attention being paid to their respective strengths and limitations.

***Sub-theme 4.1.1: Poor communication between school health nurses and students, and school health nurses and teachers***

This is the only sub-theme that arose from the theme, and it is evidenced in the responses of adolescents and teachers, which indicates that the relationship between the school health nurses and adolescents on the one hand was poor, and on the other hand, between nurses and teachers, is frosty as a result of poor communication. The responses from some of the adolescent students lend credence to the status of the sub-theme:

*“He squeezes his face, and this scares us away.”* (School 2 adolescent 2)

*“He is not friendly with students.”* (School 2 adolescent 8)

The above extracts show that the school nurse was not friendly towards the students. One of the students said that “he squeezes his face”. This is a form of communication, a non-verbal form. It is stronger than a verbal one when it comes to communicating one’s feelings and emotions. The students would not feel encouraged to get closer to the nurse. The nurse is a male nurse and may appear a bit paternalistic in the way he relates with students. Students might sometimes see him in the role of father, and those whose fathers are tough and have instilled fear in them may relate to the nurse as they would to their father. This may explain the tendency to steer clear of him, let alone seek guidance on reproductive health issues. The second extract seems to indicate the same trend as the first one. The students have gauged his countenance and body language as unwelcoming and unfriendly. Other responses further reflect the poor relationship between adolescents and the school health nurse.

*“Hmmm... Some people have been saying that nurses are harsh.”* (School 1 adolescent 5)

*“We feel shy in coming to her because we did not know whether she is a strict person or not.”*  
(School 6 adolescent 2)

The above two excerpts show that there is poor communication between these school health nurses and adolescent students because their responses were based on an assumption the public have long held about nurses, that they are harsh, abusive and intolerant. The onus is surely on nurses to dispel these impressions by opening the lines of communication through which students can more easily reach out to them. Good communication allows for openness, and allows both parties to clarify issues of mutual interest. In achieving this, the school nurse has to show that he or she possesses the required skills. When the school health nurse allows students to express themselves freely, a good kind of partnership may develop.

*“We don't really have the confidence in coming to her.”* (School 6 adolescent 3)

*“I am not sure she gives such services, anyway, if one approaches her maybe, she would do it. Even going to her for minor cases, not to talk about this, the way she attends to one, the way she talks shows you are on mile one, while she is on mile twelve. Many are not encouraged.”*  
(School 3 adolescent 7)

Lack of confidence is obvious in one of the responses. Confidence is an integral part of relationship building between a caregiver and client. The absence of this may create doubt as to the genuineness of the interactions. Trust and confidence find their expression in the kinds of confidential services rendered by school health nurses to adolescents. Adolescents would like to seek reproductive health services in an environment that ensures privacy and from health professional they can trust. This may be as a result of the fact that they are still subject to adult scrutiny and thus may want to avoid embarrassment. They will prefer to seek guidance from a caregiver who can accord them dignity and respect, and will not be judgemental in their opinions on decisions about the choices made in their reproductive health.

Studies have found that confidentiality is critical to adolescents in their health seeking behaviour about reproductive health services. In a study in New Zealand secondary schools, adolescents' choice of utilization of school health services was informed by the degree of confidentiality

that can be enjoyed by them (Buckley, McDonald, Mason & Gerring, 2009: 29). It has also been found that adolescents would want to move away from any situation in which they feel uneasy, and so will choose services where confidentiality can be guaranteed (Smith & Stepanov, 2014: 42). The study on young people's views on the role of the school nurse in the United Kingdom found that confidentiality was identified as a critical factor that attracts young people to health services. They further indicated that they want school nurses who exhibit a sense of care and empathy to their needs (Council, 2011: 19).

The issue of poor communication between school health nurses and teachers also featured in the responses of the nurses in this study. There are some areas of friction which have marred the relationship. The school nursing practice takes place in an educational environment whose custodians are teachers:

*"Hmmm... You know... The relationship between the teachers and I would have been 80-90% but... there is rivalry... this thing... But it is not possible to pick a chalk and go to classes to teach, but they believe..."* (School 4 nurse)

*"Some Principals/head teachers don't want... Some are giving health workers problems. They will say if you want to do this you must come and take permission from the school, and if you want to do that... and we are not teachers."* (School 1 nurse)

The first extract shows that the relationship between the two groups is not too cordial. The statement suggests an intrusion into school health nurses' jurisdiction, whereas school health nurses do not interfere with teachers' jurisdiction in their job area. This friction sometimes results from skills-mix in the areas where both school health nurses and teachers can lay claim, especially in adolescent reproductive health where school counsellors, who in most cases are teachers, may have adequate knowledge. This assertion was underscored by the statements of some of the adolescents, in which they indicated a preference for their school counsellors over school health nurses:

*“As for me, I don’t go there since I do not have any problem. If I have, I would first go to my mum, sister, and class teacher.”* (School 3 adolescent 2)

*“Some teachers are even better in that area. There are some teachers that are closer to the students. They do give students advice.”* (School 2 adolescent 1)

*“We have a counsellor”* (School 4 adolescent 5)

*“Same for me, I think the school counsellor should be doing that as we do not see this as part of their role.”* (School 1 adolescent 3)

Where skills-mix is evident in any work system, there is always tension and conflict between workers involved as they may be jostling for recognition, and scrambling for scarce resources as it involves delineating the boundaries among different group of workers whose functions are similar or same. Barret, Shaida and Shaw (2010: 185) suggest that besides conflict between groups resulting from skills-mix, there may be undue segmentation of care. This strained relationship is further reiterated by some of the teachers’ responses:

*“They do say, for instance, there was some time they talked about the food vendors, you know the nurses are supposed to be in charge, but I will tell you, the food vendors fear the teachers more than the nurses.”* (School 1 teacher)

*“To be sincere, these nurses do complain, the teachers would not allow them to do their work. They are really complaining.”* (School 1 teacher)

The first response may be as a result of poorly defined responsibility. The issue of who controls a food vendor depends on the purpose for which food vendors operate at a school. There is interference in school health nurses’ job areas, as is indicated in the second response. This is a clear demonstration of a poor mutual relationship between the two groups. The problem arising from food vendors’ control was corroborated by the school health coordinator:

*“Another challenge is this issue of the food vendors on the field, the food vendors in schools, some of them are not complying with laid down rules and regulations, and all efforts to get some MOH (Medical Officers of Health) to assist has proved abortive probably because of this financial issue.”* (School health coordinator)

The extracts from the school health coordinator's responses are consistent with the response of the school teacher above who said: "...*the food vendors fear the teacher more than nurses*". This sentence seems to indicate that food vendors prefer taking instructions from teachers, thereby ignoring the health instructions from the school health nurses. The food vendors, who have found that there is no cooperation between school health nurses and teachers in this respect, decided to listen to the teachers either as a mark of deference or because there is the threat of their services being rejected. Knowing that teachers control the school environment, they make opportunistic decisions about whom to heed. To be fair to them, food vendors may wish to comply with school health nurses' health instructions but these instructions may be overruled by teachers who are asserting their authority.

There are two important factors in the issue of food vendors: food quality and a hygienic environment. Here, the food and nutrition teacher may lay claim to this area of jurisdiction. The food and nutrition teacher may argue that those two aspects are within her his or her knowledge and skills domain. School health nurses, on the hand, may rationalize that it falls within the purview of health care as food and nutrition is one of the component areas of primary health care. This is a clear issue of clash of interests which may only be resolved through constant communication and interaction between both parties, and input from supervising Ministries. In the absence of collaboration of this nature, neither of the two groups may want concede any ground to the other. This situation still touches on the roles and responsibilities of school health nurses as there is constant overlapping of roles within the school environment and this affects the relationship between school health nurses and teachers. Mason-Jones et al. (2012: 1) in their findings on a review of the role of health clinics for adolescent sexual reproductive and mental health, indicate that unclear lines of responsibility are likely to generate disagreement between health workers and teachers.

There is every likelihood that teachers exhibit a domineering attitude toward nurses; it may be that they want to dictate the pace to school health nurses which they, on their part, may want to resist. School health nurses practise in an isolated environment. The anger resulting from being dominated may lead to frustration with a resultant decrease in productivity. Domineering attitudes in this situation may be a function of territorial behaviour, as individuals may be inclined to protect their interests, especially where there is a perceived threat. The second extract shows that school health nurses are subject to dual responsibility. They may not have expected a situation in which they would be responsible to school principals. What they expected was cooperation and collaboration between them and the teachers in a context where nurses and teachers are accountable to two separate systems. School health nurses are responsible to the Ministry of Health while teachers are responsible to the Ministry of Education. School health nurses expect that they deserve to enjoy autonomy which teachers should respect while teachers, on the other hand, feel that they have control over the school. Besides this, numerically speaking, in the school environment teachers outnumber nurses, especially in a situation like this, where there is only one school health nurse in the school. This numerical strength skews the authority gradient in favour of school teachers. If the authority gradient is too concentrated in one group, other groups may suffer as the members may find it difficult to discharge their role as expected of them. This problem may be resolved through effective communication at the school level or at the Ministerial level where the two Ministries involved define the terms of the power relationship between the two groups. If the two groups do not collaborate, the patient outcomes may be compromised.

## **Theme 4.2: Resources**

Resources are needed inputs for effective functioning of a system. Resources come in different forms which could be material, human, or financial. They have to be well harnessed in order to produce desired outcomes.

### ***Sub-theme 4.2.1: Lack of adequate physical, material and financial resources***

The responses of the various participants attest to this assertion:

*“Inadequate materials from the Ministry of Health. When we were coming, they ought to give us some things, some materials we might need for students. Like, we have some students they start their menstruation right in the school, somehow strange to them, they will come to us; nurse we need sanitary pad, nurse we need this, then we don't have such things to give them. At times we give them cotton wool covered with this gauze; that they should just make use of it.”* (School 1 nurse)

*“...and apart from that, there was a.....most of...there is no equipment... It will not enable to show some things to the students that this is how this is supposed to be, and this one is not supposed to be like this ...”* (School 2 nurse)

The above accounts indicate that material resources are lacking in the situation. This ranges from medicaments and instruments to other basic equipment. These materials are needed to treat minor ailments and injuries before referring more complicated cases for better management. Secondary school students may present with different kinds of health conditions that would warrant the use of some of these materials. Lack of adequate drugs is captured under the category: insufficient material resources. Some of the school health nurses emphasized this in their various responses:

*“At times, we won't have those drugs, and through the assistance of school, at times, we buy such drugs, so...”* (School 2 nurse)

*“...Failure to get all drugs on time...”* (School 4 nurse)



*“There is a problem with drugs needed for the treatment of minor ailments.”* (School 5 nurse)

School health nurses’ responses were corroborated by the responses of other participants in that they underlined the significance attached to the availability of drugs in the school health service:

*“...secondly, is the issue of provision of drugs. Actually, the programme was supposed to come with the package, supplying drugs to the schools regularly, but because of financial and some other logistic issues, Ministry of Health cannot be able to do that so that that particular duty is left in the hand of Education, SUBEB, and the PTA agency, and they can only do little, specially, now that the new administration has said that no school should collect money from the students, so and the PTA fees that the students are paying is optional, you know that in Nigerian setting, when something is optional, majority will go for the option of not doing it. So, only few students are paying PTA fees, and it is from these PTA fees that the school will run, not only the activities of the school health programme but also some other things they need to touch in the school, so making drugs available and some essential commodities have been a very difficult, and in fact, some of their staff go to the extent of using their money at times, although rare, to get drugs for the school.”* (School health coordinator)

*“The school authority should make all the necessary materials available because anything can happen to them at any time”* (School 5 Teacher)

*“School should do more, and the Ministry of Health should provide more drugs since they have drugs they can... I don't know what they call it because it is not my line. They should give these free drugs.”* (School 4 teacher)

*“In this school, sometimes when we get to our school nurse, he gives only paracetamol. There was a day somebody got injured, he asked that they should rush the person to the hospital. There was not any first aid treatment. Everything is paracetamol or no drug.”* (School 2 adolescent 1)

*“Good drugs for any kind of cases...”* (School 4 adolescent 7)

*“More drugs...”* (School 7 adolescent 2)

Provision of drugs is an essential need in the school health service. Treatment of minor ailments and injuries may not be totally achievable without adequate provision of essential drugs.

Essential drugs are the basic drugs that are used for treatment of minor ailments. They are, in most cases, affordable. Their cost is not prohibitive. The school health service operates on the principle of referrals, and conditions that appear too critical or serious to be handled by school health nurses are referred to the designated referral centre for expert management. Against this backdrop, the drugs needed for school health activities are expected to be simple and low cost. The provision of drugs reflects a collaborative effort between the school and the Ministry of Health. This synergy was expected to yield positive results. However, from the accounts of the participants, there has been some degree of default on both sides, which has made the realisation of adequate drug provision a mirage. Poor supply of drugs, among other factors, affects the provision of adolescent friendly health services in Uganda (Arube-Wani, Jitta & Mpabulungi, 2008: 214).

In meeting the needs of service beneficiaries, emergency services equipment also has to be in place in case situations demand their use. Students with conditions like epilepsy, respiratory problems, or victims of snake bites may need emergency materials for immediate intervention. In guiding adolescents in reproductive health issues, the school health nurses may require the use of audio-visual materials to aid learning. In the absence of material resources, school health nurses may not be able to optimize their potential in ensuring quality health outcomes. Lack of adequate materials may be a result of inadequate funding of school health programmes or injudicious use and/or poor management of available funds. A study on the shortcomings in the development, content and implementation of National School Health Policy in South Africa reveals that the programme implementation was handicapped by inadequate resources (Shung-King, 2013: 895). Another resource limitation which school health nurses encounter is lack of space. This was expressed by the school health nurses during the interview. Space is a physical facility that supports the provision of school health services rendered by school health nurses. This was attested to by the school health coordinator in her responses:

*“The first challenge is about space, office space for them. Like I mentioned earlier, only few schools have standard sick bays. Majority of the schools don't have standard bays. What they just have is small classroom, may be partitioned so that a health worker can have table, and put her first aid box, no space for the students to rest when the student needs to be observed. Space is number one problem.”* (School health coordinator)

A modestly furnished space is required for the effective performance of the school health nurse's role. The lack of this may affect the services that will be delivered to adolescents. The office space should be prepared and furnished, based on standard practice. Where this is not feasible, efforts should be made to provide space which may be further compartmentalized so as to provide privacy for the purposes of addressing adolescents' reproductive health issues, and for the treatment of minor ailments and injuries. The space and its location contribute to making the services adolescent friendly. Adolescents cherish their confidentiality and privacy. Many of them may not be motivated to seek school health services especially where their reproductive health issues are involved. A lack of sensitivity to adolescents' privacy from the facility providers, and sometimes, due to the ineptitude of school health nurses in advising accordingly on the proper location of space that ensures confidentiality and privacy, may jeopardise this critical aspect of adolescent health. To this end, the location of the space should be away from the prying eyes of teachers and other non-teaching staff alike. Findings from a study on the evaluation of health promotion in the Australian school youth health nurse programme show that office space location for school nurses is one of the critical factors in the school health programme, and that the office space should not be located close to teaching staff, but rather in a place where students converge (Banfield, McGorm & Sargent, 2015: 21). In a similar finding, the lack of provision of sufficient space for interactions and guidance between school nurses and adolescent students has been found to be a limitation to the success of the school health programme by North Shore Public Health Nurses (Saewyc, Roy & Foster,

2014: 21). Lack of adequate funding is the third leg of the tripod on which inadequate resources rest. This was evidenced in the responses of the participants:

*“Although, school has given them some money, but it is not enough... School should do more.”*  
(School 4 teacher)

*“Actually, the programme was supposed to come with the package, supplying drugs to the schools regularly, but because of financial and some other logistic issues...Aside that, financially, at the State level, for us to run the programme, it has been... I don't know, this financial issue has been hitting everybody hard. The programme has not actually enjoyed any partner support.”* (School health coordinator)

The response from the school health coordinator captured the funding picture of the school health service in the State. The National School health policy framework stipulates that the Federal Government of Nigeria shall be responsible for the funding of the programme while the various State Governments are expected to provide, inspect and monitor the programme implementation, and provide technical assistance and logistical support to Local Government Areas (FMOE, 2006a: 15). Without adequate funding, school health nurses may not be able to perform their role as expected of them. It is through adequate funding that resources such as drugs and equipment can be procured. In order to have well-furnished office space that will meet standard specifications, and the availability of audio-visual and book resources, enough funds have to be made available. The school health nurses, in their own responses, did not specifically identify lack of funding as a separate challenge. They emphasized, rather, what the funds were needed for – drugs, equipment, and other material resources.

*“There is a problem with drugs needed for the treatment of minor ailments.”* (School 5 nurse)  
*“Yes, hmm... No! Mixed feelings. Lack of materials and necessary support get one discouraged. There are no drugs as well.”* (School 6 nurse)

In the absence of adequate funding, school health nurses may feel the need, occasionally, to use their own money to procure medicinal drugs for the students, or to improvise in order to

meet their school nursing expectations. Unregulated provision of drugs by school health nurses may lead to a situation of dishonest practices where students are exploited by having to pay exorbitant amounts for drugs. Improvising the available resources may lead to poor performance output, which will invariably weaken the school health activities' strength and quality as the nurses may, on that pretext, jettison the standards of practice expected of them. Abundant evidence attests to the fact that inadequate funding is a challenge in school health services. Findings from a study on factors influencing national school health policy implementation in Lao DPR, show that inadequate funding was a factor militating against policy implementation (Saito, Kassada, Tomokawa & Akiyama, 2014: 1). The outcome of this study is also consistent with the finding of a study on meeting the sexual and reproductive health needs of adolescents in school-based health centres which show that the scope of the reproductive health services was constrained by inconsistent and poor funding (Boonstra, 2015: 21).



#### **Theme 4.3: Continuing professional development**

Continuing professional development has to do with the enhancement of performance of school health nurses toward delivery of quality health services to consumers. It is a form of developing individuals' capacities aimed at achieving competence. It comes in various dimensions as it is determined by the defined needs of workers. It is expected to be an ongoing activity in order to maintain optimum levels of performance. Continuing professional development entails knowledge obtained after professional entry education which has nothing to do with having post graduate qualifications (Ross, Barr & Stevens, 2013: 9).

### ***Sub-theme 4.3.1: Inadequate knowledge and skills development programmes***

Findings show that there is lack of adequate knowledge and skills development programme in line with global best practices. The responses of the participants lend credence to the position of this sub-theme.

*“Then, another thing is that I believe there should be seminars or workshops being carried out regularly for the school health workers. You know, to update on the content concerning adolescents or things like that. We need current, things are changing every day”* (School 1 nurse)

*“I would like to go for seminars and workshops frequently in order to improve my performance”* (School 8 nurse)

*“We need workshops, seminars. It could be any programme just for us to update ourselves. We are just here. We need to go to workshops and seminars”* (School 3 nurse)

*“There is no workshop, no training of any sort. We were only oriented on how to carry out hand washing, malaria control and management”* (School 5 nurse)

The responses from the school health nurses as indicated above show that they were aware of their deficiencies in the knowledge and skills needed in handling reproductive health issues including the provision of guidance to adolescents in their decision-making about reproductive health, and other school health activities. Workshops and seminars are programmes that are designed for workers in order to improve their performance. They ought to be offered periodically in order to update the workers on current practices, or when deficiencies in skills and knowledge are evident in their role performance. One of school health nurses revealed that they were only given training on hand washing, malaria control and management. School health activities in secondary schools focus mainly on adolescent reproductive health hence the need for the school health nurses to be well equipped in terms of knowledge and skills in handling their reproductive issues. They may require additional skills that equip them to guide adolescents on their decision-making. Guiding decision-making entails many cognitive activities for which school health nurses have to train. These continuing professional

development needs as reflected in school health nurses' responses were corroborated, by the school teachers:

*“School health programme is not really established in the school setting...”* (School 1 teacher)

The above insight is a perception of a school teacher on the operations of school health service.

The statement indicates that the school health service is not really being implemented as expected. The reason for this may be multi-dimensional in nature. It could portray lack of competence which may arise from inadequate knowledge and skills in handling adolescents' issues, poor communication and relationship between nurses and adolescents on the one hand, and nurses and teaching staff on the other, or poor funding and lack of adequate material resources. Professional integrity and empowerment may be largely demonstrated through competence exhibited in the course of performing one's role. Competence is a function of possessing adequate knowledge of subject matter, contents, and the skills needed in getting the knowledge one possesses across to the users, and by also making the services user-friendly. The skills in the areas of communication, relationship building, decision-making on critical matters and guidance are necessary for effective role performance. The school health nurses may need psychological support to help them build good rapport in relationships, and good assertiveness in their dealings with teaching staff:

*“There is a need for continuous orientation programme for a school health nurse, and even the teachers in the school, and one of the challenges.... so, we want to give them a continuous orientation programme that would always put them abreast of whatever information we need to give to the school so that they would be giving accurate and current information in the course of performing their job”* (School health coordinator).

The response from the school health coordinator further underscores the necessity for programmes that will enhance nurses' ability to gain access to information. Having access to information may augment their knowledge and skills base. Programmes for knowledge and skills enhancement are a part of employees' privileges that could enable them exercise control

over their job. Gaining control over their job allows individuals to plan and design their job toward meeting the expectations of their clients. It also enables workers to earn the respect of others. If school health nurses are allowed to gain more knowledge and skills, the school teachers may demonstrate their regards for school health nurses for their competence to handle school health issues. Competence is acquired through involvement in a periodic professional programme aimed at improving and sustaining knowledge, skills, and attitudes relevant to school nursing activities, and the delivery modes include workshops, seminars, conferences, lectures and mandatory training (Ross, Barr & Stevens, 2013: 9). The technical competence expected of school health nurses is one of the chief responsibilities of the State Government (FMOE, 2006: 15). This expectation is not being met due to a number of challenges. This was reflected in the response of the school health coordinator:

*“...financially, at the State level, for us to run the programme, it has been... I don't know, this financial issue has been hitting everybody hard. The programme has not actually enjoyed any partner support. The only partner that has actually helped to do some things is Partnership for Child Development, and they assisted in training of the school health workers especially on the de-worming programme, and some other activities related to school health”* (School health coordinator)

The response of the school health coordinator shows that the programme implementation was fraught with constraints. Lack of adequate finances remains the bane of the programme. The programme had no partner support which, ordinarily, it should have. The support received from the Partnership for Child Development was in the direction of a child-deworming exercise which accounted for the training assistance given to the health workers especially those in primary school environment. The partnership's support did not cover school health nurses' activities in secondary school environment. There was no training assistance for school health nurses in secondary schools hence their complaint about the lack of continuing professional development activities.



Performance quality may be compromised as a result of this loophole. A good number of studies have supported the essence of professional empowerment and the advantages that workers can expect to enjoy. Inadequate training was identified as a challenge in a study on the adolescent sexual and reproductive health programme in Nepal (Khatri, Schildbach, Schmitz & van Teijlingen, 2013: 1). Findings of a study on the impact of empowerment on professional practice environments and organizational commitment among nurses show that nurses were more committed to their job when they were given enough support, a link with information, opportunity and resources (Yang, Liu, Huang & Zhu, 2013: 44).

#### **4.6 SUMMARY OF KEY FINDINGS**

The data analysis generated some themes which are interwoven with the central issue under examination. The central issue here is how school health nurses can be assisted to provide guidance to adolescents in their decision-making on reproductive health. Seven themes were generated from the analysed data. These were: awareness of roles and responsibilities, school health nurses' activities in the school environment, knowledge and understanding of concepts and issues, guidance skills and processes, interpersonal communication, resources, and continuing professional development. Relevant extracts from the participants' responses were used to justify and sustain those themes and sub-themes. The views of school adolescents, school teachers, and a school health coordinator were built and incorporated into the analysis in order to fully explore the role of school health nurses in the secondary school environment. In summary, the findings of this study show that school health nurses have a poor awareness of their role in the school environment and are poorly prepared for the role; and also that there is lack of adequate knowledge on adolescent reproductive health issues and their decision-making in respect of those reproductive health issues. The findings further reveal that school health nurses have inadequate skills and understanding of processes needed to provide effective guidance to adolescents in making their decisions on reproductive health, there is poor

communication between school health nurses and adolescents, poor communication between the nurses and teaching staff, and inadequate continuing professional development. Against the backdrop of these findings, the school health nurses require an intervention programme that will help them clarify and understand their role properly, and enhance their knowledge of adolescent reproductive issues. The intervention programme will further assist them in the provision of guidance skills, including communication skills needed for guiding adolescents in their decision-making on reproductive health.

**TABLE 4.5: KEY FINDINGS FROM DATA ANALYSIS**

<b>Themes</b>	<b>Sub-themes</b>
Awareness of roles and responsibilities	Poor awareness of roles and responsibilities Poor role preparation
School health nurses' activities in the school environment	Provision of health education Treatment of minor ailments Provision of referral services
Knowledge and understanding of concepts and issues	Inadequate knowledge of concept of adolescence Lack of adequate knowledge of reproductive health Poor knowledge of adolescent decision making process
Skills and processes	Lack of adequate skills, and deficient understanding of processes of guiding adolescents' decision-making in reproductive health
Interpersonal communication	Poor communication between school health nurses and teachers, and school health nurses and adolescents

Resources	Lack of adequate physical, material and financial resources
Continuing professional development (CPD)	Lack of adequate knowledge and skills development programmes.



## **CHAPTER FIVE: INFORMATION GATHERING AND SYNTHESIS**

### **5.1 INTRODUCTION**

The information gathering and synthesis phase of Thomas and Rothman's intervention model (2013: 9) entails uncovering what other researchers or individuals have done to solve similar problems, and it is about "not reinventing the wheel" (Fawcett, 2013: 32). The outcome of the activities in this phase will comprise a series of functional elements that can be included in the design of an intervention programme. Findings from the analysis of semi-structured interviews and focus group discussions that took place in phase one have indicated the need to design and develop a suitable intervention programme for school health nurses toward guiding adolescents in their decision-making about reproductive health, and there was a need to know the functional elements of the successful programmes in areas similar to the issue of focus in this study. The knowledge of functional elements of successful intervention programmes is acquired through locating and selecting relevant types of knowledge by using and combining different sources of information (Fawcett et. al. 2013: 32). The activities involved in this phase comprise identifying the functional elements of successful programmes, using existing information sources and studying examples that occur naturally. In the pursuit of these activities, the first two were merged in order to identify the functional elements of successful programmes. The process of studying natural examples had been subsumed under the project planning and problem analysis phase. Using existing information sources enabled the researcher gain access to the information vital to the identification of the functional elements of successful programmes.

### **5.2 IDENTIFYING FUNCTIONAL ELEMENTS OF SUCCESSFUL PROGRAMMES**

This step was achieved by carrying out an integrative review of the existing programmes that have been developed for school health nurses in the areas guiding adolescents in their decision-making about reproductive health in the school environment. The integrative review helped in

analysing the important aspects of those programmes and in discovering the studies conducted, and their outcomes, in a particular area of research. It helps in interweaving outcomes and results from studies with diverse methodologies aimed at addressing some specific research problems (Crossetti, 2012: 12). The integrative review covers a broad range of issues from what is known, the quality of what is known and what must be known. School is the second most influential environment besides the family environment in the life of an adolescent. School health nurses are expected to perform an adaptive role of guiding adolescents in their decision making about reproductive health in line with the National School Health Policy goals and objectives (Federal Ministry of Education, 2006a: 27). In conducting this integrative review, the main review question was developed using the findings from the problem analysis and project planning phase to guide it.

### **5.2.1 Review question**

What functional elements of successful programmes are necessary to develop a suitable intervention programme for school health nurses with regard to guiding adolescents in their decision-making about reproductive health?

Sub-review questions

- 1) What types of programs have been developed for school health nurses?
- 2) What were the aims of those programmes?
- 3) What are the key elements identified in those programmes?
- 4) What were the outcomes of those programmes?

Cooper (1998) cautions that in formulating a research problem, the operational definitions should neither be too broadly nor too narrowly defined as this might lead to a glossing over of the details resulting in an inappropriate interpretation and consequently jeopardising the quality of research findings. In line with this thinking, the researcher defined intervention programme

beyond specific intervention programmes for school health nurses aimed at assisting adolescents in their decision-making about reproductive health. The review covered other programmes designed for school health nurses in other aspects of adolescent health, which were aimed at assisting them in their role performance. The concept of school health nurse was extended beyond its descriptive mark, hence the inclusion of the public health nurse, which is a generic term for any nurse working toward improving the health of members of schools, communities and other places whose health concerns constitute public health.

### **5.2.2 Identifying and selecting existing types of information**

The integrative review progressed towards the identification and selection of relevant existing types of information which have to do with programmes that have been developed for school health nurses in their practice areas. This stage encompasses the collection of data from the reports of past important research that include different programmes that were developed for school health nurses. The search included survey studies, descriptive studies, quasi-experimental studies and studies using a mixed-method approach. This is the stage at which the target and accessible population was identified. In this review, the population was school health nurses. The context of the role performance determined the study population. In a secondary school setting, adolescent reproductive health requires the input of school health nurses who are the most visible health professionals in the school system. Cooper (1998) posits that the use of informal, primary and secondary channels and personal research findings are required to effect data collection. The researcher had a little to achieve in this regard because this particular area of study i.e. intervention programmes for school health nurses toward the provision of guidance to adolescents in their decision making about reproductive health is a new area that is yet to be well researched and developed. This prompted the researcher to modify the sub-review questions to reflect the intervention programmes that had been developed for school health nurses in adolescent health generally, instead of restricting them

to guidance provided by school health nurses for adolescents in their decision-making about reproductive health. The researcher consulted with some experts in school nursing and only a few relevant articles were volunteered. Peer-reviewed journals were searched for relevant articles on the research problem. The ancestry approach, which entails the checking the reference lists of the articles consulted, was undertaken (Cooper, 1998). Literature was mainly sourced from computerised databases.

### **5.2.3 Information sources**

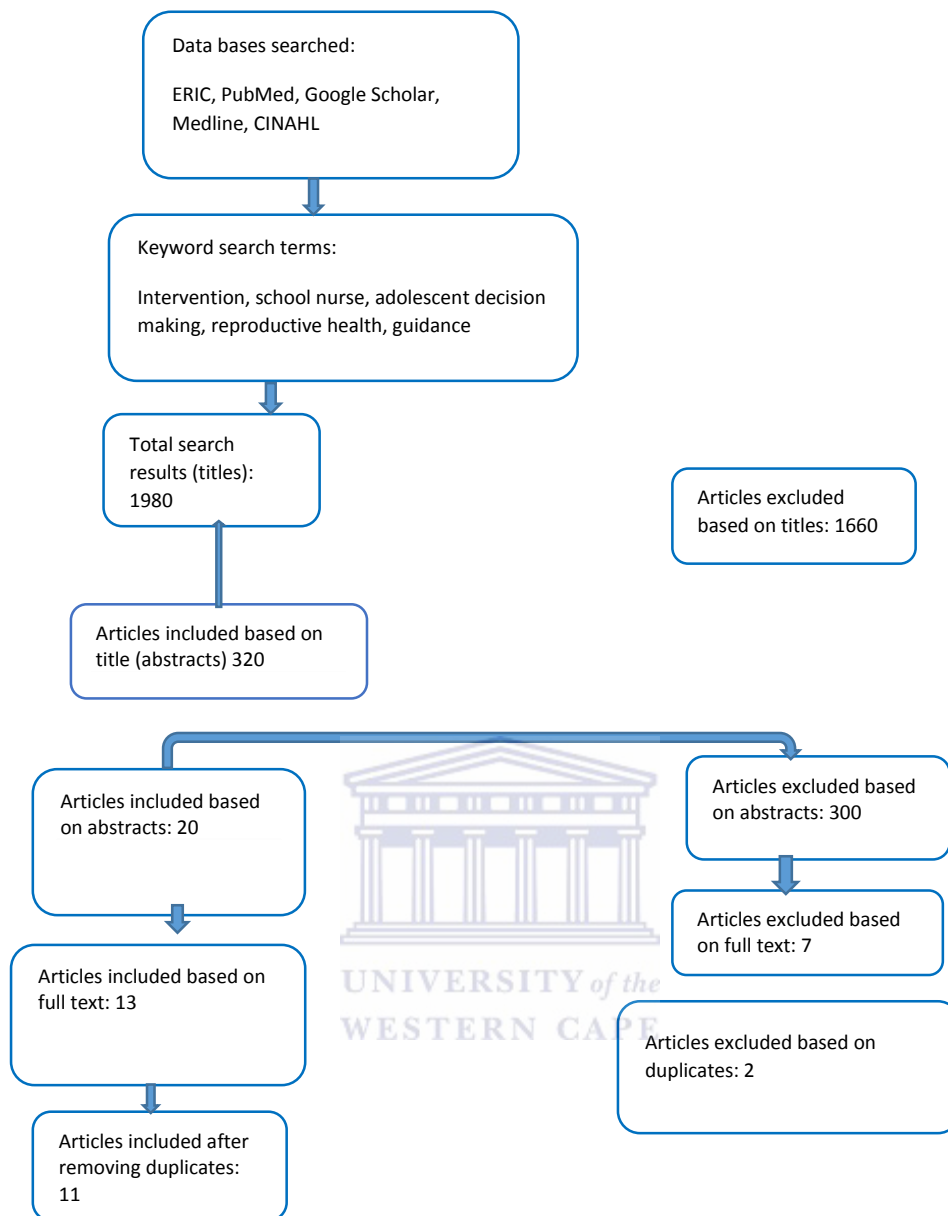
The computerised databases used included: CINAHL (Cumulative Index for Nursing and Allied Health Literature), ERIC (Educational Resources Information Center), PubMed, Google Scholar, and MEDLINE. The assistance of the Faculty librarian was sought in this regard. In developing the search strategy, a set of keywords and descriptors were delineated and truncations were used appropriately so as to guide the search process. The following set of descriptors and search terms were used in searching for the relevant materials: school nurse, school nurs\*, public health nurse, public health, community health nurse, community health, community health nurs\*, and community health nursing. The descriptors for intervention included: intervention, intervention studies, intervention models, intervention programme, education, training, mentoring, and empowerment; transition, learning with or without programme attached. Adolescent descriptors included: adolescent, youth, child, adol\*. For decision making, the following descriptors were employed: conclusion, resolve, determination, resolution, choice, option, or alternative. The reproductive health descriptors included: reproductive health, reproductive sexual health, sexual health, sexuality, or human sexuality.

### **5.2.4 Eligibility criteria**

Articles published between the period 2000 and 2015 were included in the review. This range was purposively selected after a review of literature showed the scantiness of intervention programmes on enhancing school nurses' role performance. There were no specific articles on

intervention programmes for school health nurses relating to the guiding of adolescents in their decision-making about reproductive health. However, articles that reported intervention programmes for school health nurses on other aspects of their role and responsibilities were included. The review included studies conducted only in English. Intervention programmes that have been evaluated were mainly included in the review as these presented the researcher with the programme outcomes. The following eligibility criteria were further considered for the selection of articles: review articles, descriptive studies, triangulated studies, comparative studies, randomised controlled trials, and qualitative studies. The evaluation studies that were inconclusive regarding the outcomes, and study designs were excluded. The intervention programmes developed by school health nurses for adolescents were also removed since this was not the focus of the study. The intervention programmes by other health professionals for adolescents were also removed as were other intervention programmes that bear no relevance to the review purpose. The initial search yielded 1980 papers. A series of filtering took place based on the inclusion and exclusion criteria. There were three hundred and twenty articles based on title, twenty based on abstracts and thirteen based on full text. The number of remaining articles reviewed is eleven (See figure 5.1)





**Fig 5.1: Flowchart: the screening process to select articles**

### 5.2.5 Evaluation of data

This is the stage at which data elements would be assessed for being considered for review. This can be determined before data collection (a priori) or assigning weight to the data elements in all the articles (a posteriori). Implicit in this decision is that less weight is assigned to the weak articles (Cooper, 1989: 104). The eleven remaining articles were evaluated based on the set criteria.

### *Evaluation criteria for research findings*

The researcher employed an adaptation of the evidence scoring system developed by Beck (2001) and later modified by Park and Jones (2010) for evaluating research findings that qualified for a review (Rush, Adamack, Gordon, Lilly & Janke, 2012: 345). Each paper was rated based on its level of evidence using the following criteria:

Study design (experimental) = 3points

Longitudinal= 2 points

Descriptive and qualitative= 1

Sample size (greater than 100=3 points; 50-100= 2 points; and 0-less than 50= 1 point)

The research papers were evaluated and scored by the researcher and a consultant for an inter-rater agreement (See table 5.1). The inter-rater agreement is a means of quantifying the proximity of scores assigned by a number of raters to the same study participants. If the level of closeness is high, it means the difference in their observation is minimal thereby ensuring the consistency of the data collection method. It is normally used for categorical data (Gwet, 2008: 29).

**TABLE 5.1: INTER RATER AGREEMENT SCORES OF RESEARCH PAPERS**

<b>Author</b>	<b>Study design</b>	<b>Rater 1</b>	<b>Rater 2</b>	<b>Sample size</b>	<b>Rater 1</b>	<b>Rater 2</b>	<b>100%</b>
Schoessler and Leever (2000)	Descriptive	1	1	86	2	2	
Sebuliba and Vostimis (2001)	Descriptive	1	1	150	3	3	
Gregg and Wozar (2003)	Descriptive	1	1	730	3	3	
Hootman and King (2002)	Descriptive	1	1	62	2	2	
Houghton (2003)	Descriptive	1	1	27	1	1	
Winkelstein et al. (2006)	Quasi experimental	3	3	46	1	1	
Chandler (2008)	Descriptive	1	1	764	3	3	
Campbell (2009)	Descriptive	1	1	20	1	1	
Pfister-Minogue and Salveson (2010)	Quasi-experimental	3	3	12	1	1	
Goto et. al. (2014)	Quasi-experimental	3	3	26	1	1	
Kenefick et al. (2014)	Descriptive	1	1	730	3	3	

Total number of coded studies= 11

Total number of coded studies in agreement= 11

Rater 1-Rater 2= Difference score

Percentage agreement is the total number of 0 difference scores divided by the total number of all scores (sample size)

Total number of 0s in difference column= 11

Total number of scores available= 11

Percentage agreement is 11 divided by 11 multiplied by 100=100% or 1

From the above result, the inter-rater agreement is high. The inter-rater agreement was a highly critical aspect in the data evaluation process since it checks against researcher evaluating research in a subjective manner (Cooper, 1989: 104).

### **5.2.6 Data extraction**

A standard format (Russell, 2005: 3) was created which summarized the authors, the design, sample, aims, findings and limitations of the research information. This format helped in comparing the data toward the evolution of the sub-categories, categories and the theme.

**TABLE 5.2: SUMMARY OF CHARACTERISTICS OF INCLUDED STUDIES**

<b>Author (year &amp; country)</b>	<b>Intervention</b>	<b>Design</b>	<b>Sample</b>	<b>Aim</b>	<b>Finding</b>	<b>Limitation</b>
Goto et al, 2014, Japan	Health literacy programme	Quasi experimental	26 public health nurses	To change communication practices and norms among public health nurses  To improve access to information for community residents	85-100% agreed to the usefulness and appropriateness of the workshop  Application of new knowledge	Difficulty in sharing new skills with colleagues  Challenges from changing work norms
Gregg and Wozar, 2003 USA	Continuing education programme	Descriptive	16 school nurses	To assist school nurses in accessing health information needed for treatment of students and the school community	Increase in the use of websites-MEDLINE plus and HSLs health information	
Chandler, 2008 USA	Online distance learning programme	Descriptive	764 public health workers	To assist public health of workers in meeting emergency situation demands	A high degree of participants' satisfaction, and increased level of understanding of the basic emergency preparedness	
Campbell, 2009 USA	Orientation programme	Descriptive	6 school nurses, 14	To provide school nurses with the tools necessary to safely and		Sample too small for survey studies. Modules

			school nurse coordinators	effectively manage a school health program		on standard of practice and professional performance were lengthy
Pfiste-Minogue & Salveson, 2010 USA	Training programme	Quasi-experimental design	12 public health nurses	To determine the effectiveness of a training programme  To determine the extent of using behaviour change counselling as a feasible and useful change tool	The workshop was described as valuable	Behaviour change counselling coding tool was used instead of behaviour counselling tool
Kenefick et al, 2014, USA	Online competency-based training programme	Descriptive	730 health professionals	To provide and ensure a competent workforce by strengthening and sustaining the capacity of the local health board to prepare for and respond to public health issues and emergencies	Modules effectively increased trainees' knowledge about specific content The trainees' perception of their ability to perform improved	
Houghton, 2003, USA	Mentoring programme	Descriptive	27 school nurses	To assist school nurses on providing care or teaching educational staff about the care of students	The programme was found useful in the areas of role delineation, job satisfaction and knowledge increase in	The sample size was too small

Hootman & King, 2002 USA	Educational programme	Descriptive	62 school nurses	To assist school nurses in the identification of potential mental health problems	school nurses' adjustment to their role The programme led to skill enhancement  It helped in improving their nursing skills They found the programme useful	It does not adequately address mental health assessment
Winkelstein et al, 2006 USA	Educational programme	Quasi-experimental	46 school nurses	To assist rural school nurses in improving asthma management of children in school setting	The study increased asthma knowledge  It increased self-efficacy among school nurses	Time was a constraint for school nurses' participation
Sebuliba & Vostanis, 2001 UK	Training programme	Descriptive	35 senior managers 85 health professionals	To acquire skills in the appropriate assessment or referral of some mental health cases by the primary care staff	It increased the awareness of mental health issues and their knowledge of staff role within child mental health services	Problem of reconciling different perspectives of the diverse health professionals that participated in the study

Schoessler & Leever, 2000 USA	Mentoring programme	Descriptive	86 school nurses	To provide skill-based mentoring for school nurses in the use of computers and enhancing their interaction skills		
----------------------------------	---------------------	-------------	------------------	---	--	--





### 5.2.7 Data Analysis

Data analysis entails the reduction of the separate data points obtained by the reviewer into a single unified statement about the problem (Cooper, 1998: 104). The analysis of the data extracted did not require any statistical input. Cooper (1989:108) argues that the integrative review that focuses on identification of intervention programmes would not involve the use of statistics in arriving at a conclusion. The standardized table format allowed the authors to do some comparison of the data. The elements found in the data were merged thereby leading to the emergence of themes, categories, and sub-categories. These are represented in the table below.

**TABLE 5.3: THEMES, CATEGORIES AND SUB-CATEGORIES FROM INTEGRATIVE REVIEW**

Theme	Categories	Sub-categories
Role orientation	Roles and responsibilities in school health programmes	Identification of potential health condition Expanded role of teaching educational staff Health information Referrals
Knowledge and skills	Knowledge and skills in performing roles and responsibilities	Assessment of clients with potential and actual health conditions Management of clients with health conditions
Interpersonal communication	Building relationship with staff and students	Mutual interaction between school nurses, adolescents and teachers

The data analysed from the integrative review was used in answering the sub-review questions as indicated in the introductory aspect of the review.

### ***5.2.7.1 Findings relating to sub-review question, “what types of programmes have been developed for school health nurses?”***

Altogether, 11 papers qualified for the review. Of these, six papers reported intervention programmes developed exclusively for school nurses, two for public health nurses, one for public health workers, and the remaining two were for all health professionals. Besides those programmes that involved school health nurses exclusively, school nurses were found to be involved in all others. As noted earlier in this study, in some contexts the terms public health nurse and school health nurse are used interchangeably while in others, the public health nurse functions as a school health nurse, and vice versa. None of the studies focused on the provision of guidance to adolescents in decision making about reproductive health by school health nurses. Three of the intervention programmes were health condition-specific, one was about the role socialization of the school health nurses, and two were about mentoring school health nurses, one dealt with emergency preparedness, and one related to the competency of health professionals including school health nurses. One intervention programme each was on field activities and health literacy respectively and the last one focused on computer skills. These programmes reflect the following design forms: training programme (six), education programme (two), orientation programme (one), and mentoring programme (two). For the purpose of this review, each of the intervention programmes will be examined for their nature and relevance.

#### **Training programme**

Armstrong (1996: 3) defines training as “a planned process to modify attitude, knowledge, or skill behaviour through learning experience to achieve effective performance in an activity or range of activities”. Training comes in handy when there is knowledge gap concerning the skills needed to carry out role performance hence its emphasis on enhancing the skills toward developing the abilities of the employees found in such work situations. Coyle-Shapiro, Hoque,

Kessler, Pepper, Richardson & Walker (2013: 48) identify three forms of training: induction training, remedial skills training and developmental training. Induction training is carried out upon the employment of a new member of staff as this would enable him/her to grasp the functions of the establishment, the chains of command i.e. the hierarchical structure of the organisation. It also enables the new worker to undergo some socialisation process in making his/her stay in the establishment an eventful one. Remedial skills training addresses the gap or deficiency in the performance of a worker which may arise from the technological complexity and/or changes associated with the job. Developmental training is futuristic in nature as the purpose of training is for immediate gain or benefit of the organisation, rather than positioning it for better effectiveness in the near future. This accounts for periodic training programmes which may not necessarily be a function of skills-deficit in job performance. The contents of the training programme would depend on the purpose they are meant to serve. The content aligns with the needs of the staff hence the requirement for carrying out needs assessment.

#### Mentoring programme

This is an intervention programme designed for workers to ensure effectiveness and judicious use of resources. Mentoring has been described as a process of nurturing a newly employed person in meeting the expectations of the organisation through good performance which is realisable where there exists a spirit of teamwork, an adaptation to the new environment, and development of trusting relationships (Zhang, Deyoe & Matveyeva, 2007: 1). A newly employed worker may lack a particularly needed skill in order to discharge his functions well in an organisation. Such a worker needs to be mentored in these identified areas so as to gain knowledge which would build confidence as he moves from a novice state to that of an expert. Wong and Premkumar (2007: 5) indicate three models that can be used to view mentoring: the apprentice, the competency and the reflective models. The apprentice model is of view that a mentee gains knowledge of a task by observing what the mentor does, and learns thereof. The

competency model argues that the mentee gains more knowledge and skills when the mentor provides feedback on the mentee's performance and progress. Becoming a reflective practitioner is the very essence of the reflective model as mentoring becomes an intentional, insightful, and nurturing process aimed at ensuring the growth of both the mentor and mentee. For effective mentoring to take place, the mentoring relationship must first develop through four stages which include preparing, negotiating, enabling, and coming to closure. Preparing is the phase when the potential mentors experience diverse processes in assessing their readiness for the mentoring task. The potential mentors reflect on their attitudes and values to appraise their readiness for the mentoring relationship. Negotiating has to do with engaging the mentees with some level of expectations about the success of the relationship. The enabling phase entails nurturing of the mentees, providing guidance, and guiding them through certain aspects of the job requirements. This takes a relatively long time to achieve. Finally, coming to closure encompasses the dividends of the relationships; the gains, benefits, and the challenges. This phase affords the duo the opportunity to harvest those dividends in order to forge ahead (Wong & Premkumar, 2007: 6)

#### Education programme

The education programme focuses on imparting knowledge to the individuals or workers in the area where there have little or no knowledge. It aims at increasing workers' knowledge with the resultant effect on attitude and beliefs through modification (Coyle-Shapiro et al. 2013: 47). The models for developing education intervention vary. The choice of design is a function of the researcher's preference. However, Abd El Aziz, Aki and Ibrahim (2009: 222) delineate three phases of education intervention. These include pre-intervention, intervention and post intervention phases. The pre-intervention phase entails the needs assessment for learning. The learning needs are articulated based on the identification of deficiencies of workers' knowledge in the relevant areas. The intervention phase stretches across the learning needs and the

practical solutions toward addressing those needs. This phase requires the application of a series of learning methods such as brainstorming, flyers and hand-outs in order to pass the information to the learners. The post intervention phase covers the evaluation of the intervention activity to ascertain whether the stated objectives have been met. This activity is measured by the level of change in attitude and behaviour. This can be measured by using post-test designs.

#### Orientation programme

Orientation is an activity designed for new workers to acquaint them with the goals, technical arrangements and social relationships of an organisation with the intention of building a good initial experience with the ultimate focus on staff retention (Barr, 2011: 5). Put differently, it aims at reducing staff turnover. The orientation programme helps in adapting individuals to the new work environment and promotes efficiency with minimal losses on the part of the organisation as a result of the poor adaptability of its workers.

#### ***5.2.7.2 Findings relating to sub-review question 2 “What were the aims of those programmes?”***

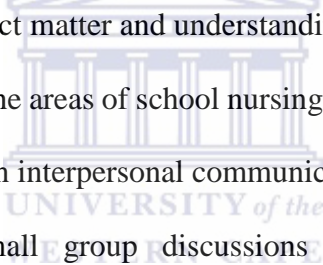
The intervention programmes developed for school health nurses in various health care areas had aims which they focused on addressing. All six training programmes had as their aim enhancing knowledge and skills of school health nurses in their respective roles and responsibilities. The mentoring programme focused on assisting school health nurses toward their role performance. It also targeted enhancing their skills and knowledge for teaching educational staff about the care of their students. The educational programmes addressed issues touching on clinical and inter-personal relationship skills. Lastly, the orientation programme was all about providing school health nurses with the skills necessary to manage a school health programme effectively. These skills are focused on practice and professional performance. The

synopsis of all the aims of the respective programmes points in one direction - knowledge and skills enhancement toward building the capacities of school health nurses in their various roles and responsibilities.

### ***5.2.7.3 Finding relating to the question, “What are the key elements of successful intervention programmes?”***

From the review of intervention programmes that have been evaluated, the following key elements emerged. The importance of the evaluation was to enable the researcher know whether these programmes have been implemented, and how successful they were.

The key elements indicated below constituted the core of those intervention programmes without which they would be meaningless.

- 
- Knowledge of the subject matter and understanding of the content
  - Skills enhancement in the areas of school nursing, care delivery and guidance issues
  - Development of skills in interpersonal communication
  - Using role plays, small group discussions and lectures as a method of communicating the message to the beneficiaries
  - Resources such as facilitators, handbooks, guidelines and funds were utilised.
  - Duration of instruction ranges from 2-3hrs per day

*Knowledge of subject matter and understanding of the content* is critical in any intervention programme as this is its crux. The purpose of an intervention programme is largely to increase the knowledge and skills of individuals in performing their roles effectively. Skills reflect the mastery or prowess an individual is able to exhibit in carrying out a specific task. It usually arises from the knowledge and understanding of this with regard to their work, their organisation and their environment (World Health Organisation, 2003: 8). The knowledge of the subject matter and the skills needed in actualising the knowledge in the end user is critical to any intervention programme. Each different activity requires a specific skill in addressing it.

In interpersonal communication, specific skills are required. This is a human relation activity which is different from a technical task hence the need for communication skills as opposed to technical skills required for technical tasks. Skills are in three forms: technical, human and conceptual. Technical skills have to do with prowess in a particular activity. It entails the exhibition of ability in the use of appropriate tools and techniques, while human skills are employed when there is a need to work effectively with people, being responsive to their needs and emotions and creating an environment of trust and confidence. Conceptual skills allow individuals to work with ideas, especially abstract ones, which may help improve their activities in the work place by being more creative and futuristic (Daft, 1999: 43).

*Role play* is a method of delivering training programmes to the intended beneficiaries. It is a simulated form of activity in which participants act out a role that highlights the theme, allowing them to experience the associated feelings, practise the skills, and gain an understanding of the issues and messages being conveyed (Oh & Solomon, 2014: 216). Role play comes in handy where participants share similar work experience. Role play aids in recalling what is acted, its purpose, and the skills employed during the activity which are easily transferred to the real work situation. It also helps in simplifying complex issues for easy comprehension. However, role play has disadvantages as it can become counterproductive if the actors get too immersed in their roles thereby making them lose objectivity or the focus of the role play. Sometimes acting can become the goal rather than being an activity towards achieving a goal (DEPOCEI, 2013: 26).

*The discussion method* is also an activity based training method. It allows for a topic to be examined by enabling every participant to make their contribution toward understanding it. It is a form of social interaction that encourages participants to develop the ability to talk and listen (Abdu-Raheem, 2012: 293). The discussion method focuses on a limited set of issues, principles and key ideas as this helps participants in gaining an in-depth understanding rather

than the superficial manner which the lecture method produces. Through the discussion method, the trainer may link a prior knowledge of the participants to new information on those salient issues which helps them in correcting wrong knowledge and build on the appropriate one. The role of a trainer or facilitator is to direct the discussion by ensuring that the focus is not lost in the course of the activity, and that he or she encourages reluctant students to participate effectively, and curb the excesses of or domination by the more vocal and assertive participants (Kukuru, 2012: 180)

*The lecture method* is a form of didactic presentation in which the lecturer, facilitator or content expert addresses a large number of learners at one time. Where a large amount of information needs to be disseminated, the lecture method becomes an effective instrument (Emmanuel, Ferris, Von Gunten & Von Roenn, 2002: 17). It is also a means of conveying personal opinions, and helps in the critical analysis of the subject matter. In using this method, the lecturer or facilitator is expected to have a good grasp of, and be familiar with the content details of the subject matter (DEPOCEI, 2013: 21). This method may not be the best for transmitting knowledge as the participants' involvement may be too minimal to achieve the intended outcomes of the exercise. In addition, it is not suitable for the purposes of acquiring new skills and techniques. In the lecture method, the attention span of participants may decline hence a need to intersperse the method by asking for the opinions or contributions of the participants.

*Resources* are expressed both in the form of human and material resources. The human component may be regarded as a facilitator or trainer. The facilitator is expected to provide an appropriate learning environment for the trainees. He or she is expected to provide the psychological climate needed for cognitive activities. A trainer is expected to have a good knowledge of the subject matter and possess good communication skills that will make both the trainer and trainees operate on the same wavelength (Emmanuel et. al. 2002: 17). The material resources include manuals, trainer and participants' guides and audio visual aids.



Manuals come in the form of booklets and contain the content details of the subject matter. Manuals are made more useful when the inputs of the end users are sought in the course of its development. The topics of interest may be packaged in one single manual or spread out in a number of modules. The trainer and participants' guide enable the two parties to follow the process of the training activities. The participants' guide may contain the technical component of the unit while the trainer's guide should direct the session activities. Audio-visual aids are critical to training activities. They help strengthen what participants have been taught and also spur them on towards more intellectual activities (Holland, 2012: 1036). Audio aids may include Compact Discs and tapes, while visual aids could appear in form of posters, wall charts, flip charts, overhead projections and computer-projected presentation slides.

#### ***5.2.7.4 Finding relating to sub-review question: "What were the outcomes of the intervention programmes"?***

The review indicated the outcomes of the respective programmes. Eleven intervention programmes were reviewed out of which nine were evaluated for effectiveness while two studies were yet to be evaluated. The result of the multi-disciplinary training programme that was evaluated for skills in the appropriate assessment, management or referral of some mental health cases by primary care staff shows that the programme increased their awareness of mental health issues and their knowledge of staff roles within child health services (Sebuliba & Vostanis, 2001: 191). The findings on programme evaluation by Hootman, Houck and King (2002: 191) which aimed at assisting school nurses in the identification of potential mental health problems indicate that the programme helped in improving their nursing skills and they reported that they found the programme useful. The training programme that was developed and evaluated for assisting school nurses in accessing health information needed for treating students was productive as all participants reported that their knowledge and their access to the use of websites, Medline Plus, and HSLs's in sourcing health information improved. (Gregg

& Wozar, 2003: 398). The programme evaluated how well school health nurses were assisted in their goal of providing care or teaching educational staff. It was indeed found to be useful in the area of role delineation, job satisfaction, and knowledge increase in school nurses' adjustment to their role and brought about skills enhancement (Houghton, 2003: 24). In the educational programme developed for assisting rural school nurses toward improving asthma management of children in the school setting (Winkelstein et al 2006: 170), there was an increase in asthma knowledge, and increased self-efficacy among nurses. The outcome of the programme for public health workers, including school nurses, toward assisting them in meeting the emergency situation demands shows that the programme resulted in a high degree of participant satisfaction and increased level of understanding of basic emergency preparedness (Chandler, 2008: 676). The programme for assisting public health nurses in determining the extent of using BCC as a feasible and useful tool was effective as the participants described the programme as valuable (Pfister-Minogue & Salveson, 2010: 544). The programme evaluated for effectiveness in ensuring a competent workforce by strengthening and sustaining the capacities of health professionals, including school nurses, to prepare for and respond to public health issues and emergencies was successful as the participants agree to the fact that modules that were taken effectively increased their knowledge about specific content and improved trainees perception of their ability to perform module specific learning objectives (Kenefick et al. 2014: 485). Some of the limitations of the programmes include: difficulty in sharing their new skills with colleagues, challenges in changing work norms, and lengthy modules, weak level of evidence and inability of generalizing the intervention programmes.

### **5.3 SUMMARY**

The integrative review of some selected intervention programmes was undertaken in order to respond to the issue relating to the identification of key elements of successful intervention

programmes. This is one of the requirements for developing an intervention programme for school health nurses toward guiding adolescents in their decision-making about reproductive health. The review provided clues for the sub-review questions raised. The process of review was observed. The flowchart indicating the screening process of those studies was presented. The studies selected for review were presented in a tabular form alongside their characteristics for easy view. The review was conducted by the researcher and a consultant for second opinion. The inter-rater agreement score was one hundred percent. The intervention programmes in the review included orientation, mentoring, educational and training programmes. The issues raised within different intervention programmes were delineated into themes, categories and sub-categories. The key elements of the successful programmes were identified and discussed. The outcomes of the evaluated studies were also discussed.



## **CHAPTER SIX: DESIGN PHASE**

### **6.1 INTRODUCTION**

This phase was used in addressing objective five of this study (see details in chapter one). Program design entails the conversion of programme objectives using a detailed understanding of the issues and concerns of the target population into a fresh package (Main, 2011: 11). Design involves activities that determine the extensiveness of the intervention based on the principles, goals and activities involved (Fraser & Galinsky, 2010: 459). Design is a third phase of Intervention Design and Development model. Intervention research yields two types of products which include: the research data that demonstrates relationship between the intervention and the behaviours or outcomes that define the problem of interest, and the intervention which may include a strategy, technique or programme, informational or training materials, or environment design variables (Fawcett et. al. 2013:35). Research findings arising from phase one of the study (see details in chapter four) showed that school health nurses are deficient in the knowledge and skills needed to guide adolescents in their decision making about reproductive health.

In designing an appropriate intervention programme for school health nurses which will assist them on guiding adolescents in their decision making about reproductive health, the results of phase one of the study (see details in chapter four) and the outcome of phase two (see details in chapter five) were merged. The design domain is assumed to have some intervention elements that could be fixed while others may require attention for design (Mullen, 2013: 169).

#### **6.1.1 Design domain**

To design an intervention requires that certain elements interrelate with one another. This is an essential aspect of it. These elements could be fixed or flexible ones. Fixed elements do not require design as there is little or nothing that can be changed about them. The flexible ones are those set for design. In the course of designing an intervention for school health nurses on

guiding adolescents in their decision-making about reproductive health, interaction took place amongst the researcher, consultants and school health nurses towards creating an observational system and the specification of intervention elements. These, in addition to techniques, constituted the intervention system.

### 6.1.2 Design objectives

- To design relationship qualities which have to do with the skilled use of emphatic communication techniques by school health nurses in the school environment
- To design skills and knowledge needed by school health nurses in the guidance process

The objectives stated above constituted fluid elements that require design whereas resources, continuing professional development and school environment are the fixed aspects of the design domain for which design was not required.

### 6.1.3 Design requirements

The design requirements of the intervention entail the conditions that must be fulfilled for an intervention to be considered to have taken place (Mullen, 2013: 170). The design requirements for this intervention programme included the following:

- The intervention programme must be suitable for use in the school environment. Put differently, it should be able to provide the necessary knowledge and skills that school health nurses require toward guiding adolescents in their decision-making about reproductive health.
- It should also be useful to other health workers in the school environment or any other worker who also helps in guiding adolescents in their decision-making about reproductive health.

- The use of the intervention programme should be cost effective as schools and other government agencies may not be able to afford elaborate training for their school health nurses and other health workers.
- The intervention programme should be packaged in a compact and handy form and be made user-friendly by avoiding unnecessary technical jargon that may be confusing.

Activities that are implicated in the design phase include designing an observational system and specifying procedural elements (Thomas & Rothman, 2013: 9).

## ***6.2 Observational system***

An observational system is a means of assessing an outcome or a product and this is usually predetermined. It is vital to test through the use of a pilot programme which is a means of determining its effectiveness (Fawcett et. al. 1994: 36). An observational system is a form of measurement which could either take a qualitative or a quantitative form. An observational system is a three-pronged phenomenon. It consists of definitions in operational terms the behaviour associated with the problems. This takes the form of pre-intervention design which entails the demonstration of expected levels of knowledge and skills of school health nurses in respect of guiding adolescents in their decision-making about reproductive health. This was expressly stated, and it helped in assessing the intervention outcome as measured by their knowledge and skills after the intervention. The second aspect of the observational system is examples and non-examples of the behaviour of the products in order to discriminate between occurrences of the behaviour. The examples and non-examples of outcome were achieved through observation of behaviours during and after an intervention along with semi-structured interviews of the training workshop participants.

### 6.2.1 Designing assessment

Assessment constitutes the essence of the design of an observational system as it enables the researcher to determine the outcome of the intervention programme during the pilot-testing phase. Poor assessment of the programme will distort its outcome and blur the realisation of the programme objectives. Outcome assessment is a process that entails appraising the achievement of a group of learners in order to receive feedback toward improving the content, and teaching which will enable learners to learn more (Banta, 1996: 3).

There are two forms of assessment used in this programme implementation. These are:

- Formative assessment
- Summative assessment

#### Formative assessment

This aims at improving products, programmes or learning activities as it examines various aspects of an ongoing programme as it is being implemented. Data collected in the course of implementing the programme are analysed and built into the programme with a view to achieving its desired end. Formative assessment issues regarding the design of this intervention programme are as follows:

- Was the learning content adequate and appropriate for the learners
- Were the instructional strategies appropriate for the learners?
- Was the allotted time for the content delivery enough?
- Does the implementation of the programme conform to its design?

Summative assessment is a means of appraising the outcome of the programme implementation. It enables the implementer of a programme to consider its effectiveness. In summation, it addresses how the programme will help its beneficiaries toward acquiring more

knowledge and better skills in the appropriate area. It usually takes place after the programme has been implemented. It also helps in the refinement of the programme as necessary changes and modifications would have taken place. For the purposes of articulation of both formative and summative assessment activities, the researcher adopted a 9-step process programme assessment model (Wall, 2014: 209).

### **6.2.2 Description of modified 9-step process programme assessment model**

Assessment of programme implementation is a systematic, detailed and careful means of documenting the nature and results of programme implementation (Wall, 2014: 209).

According to Wall (2014: 210), the process comprises nine steps which are as follows:

- Defining purpose and scope of assessment
- Stipulating assessment questions
- Indicating assessment design
- Creating data collection and action plan
- Collecting data
- Analysing data
- Recording findings
- Disseminating findings
- Providing feedback for programme improvement

In view of the fact that this study aims at developing an intervention programme to assist school health nurses with guiding adolescents in their decision-making about reproductive health and which outcome (summative assessment) will be determined by a pilot test as specified in phase four of the Intervention Design and Development model, only the first seven steps of the 9-



step model process will be considered for assessment. The remaining two steps are akin to the fifth and sixth phases of the Intervention Design and Development model which are beyond the scope of this study.

### **6.2.3 Application of 9-step model to the assessment of a training programme**

#### ***Step 1: Define the purpose and scope of assessment***

This step helps in establishing the outcomes and value of the programme being provided. It requires the design of both a formative and a summative assessment. The assessment scope should not be too broad or narrow. The purpose of the program was to assist school health nurses in Ijebu Ode Local Government Area of Nigeria with the provision of guidance to adolescents in their decision-making about reproductive health. The following issues would be addressed by the assessment:

- School health nurses identifying their role in school health service
- School health nurses having the knowledge of adolescents' decision-making process in reproductive health
- School health nurses understanding the skills they can use to guide adolescents in their decision-making about reproductive health
- School health nurses having knowledge of the skills and attitudes needed for communication with adolescents and staff

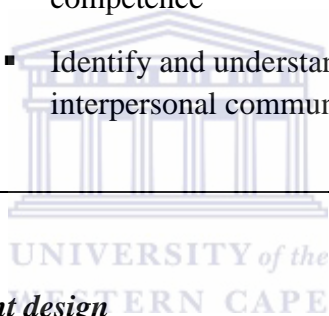
#### ***Step 2: Specify the assessment questions***

Assessment questions were formulated in the mode of learning objectives and the criteria for the evidence needed to answer the questions were stated.

**TABLE 6.1: ASSESSMENT QUESTIONS AND POSSIBLE EVIDENCE**

Question	Possible Evidence
Are school health nurses aware of their roles in the secondary school environment?	<ul style="list-style-type: none"> <li>▪ Understand an overview of national school health policy</li> <li>▪ Identify their roles and responsibilities in line with national health policy direction</li> </ul>
Are school health nurses familiar with the concept of adolescence?	<ul style="list-style-type: none"> <li>▪ Understand the meaning of adolescence</li> <li>▪ Identify and understand the stages of adolescence</li> <li>▪ Identify and understand theories of adolescence</li> </ul>
Can school health nurses exhibit what adolescent reproductive health entails?	<ul style="list-style-type: none"> <li>▪ Understand historical development of reproductive health</li> <li>▪ Identify and understand reproductive rights</li> <li>▪ Highlight factors affecting reproductive health</li> <li>▪ Identify and understand components of adolescent reproductive health</li> <li>▪ Enumerate and understand factors influencing adolescent reproductive health</li> </ul>
Do school health nurses have a good grasp of adolescent decision-making processes	<ul style="list-style-type: none"> <li>▪ Understand decision making models</li> <li>▪ Understand process of decision making by adolescents</li> <li>▪ Identify and understand the factors influencing decision-making by adolescents</li> </ul>
How familiar are school health nurses with adolescent decision making and its application to guidance	<ul style="list-style-type: none"> <li>▪ Understand historical development of guidance</li> <li>▪ Identify and understand the principles of guidance</li> <li>▪ Understand the conceptual perspective of guidance</li> <li>▪ Understand the link between conceptual perspective and guidance</li> </ul>
Can school health nurses discern the skills needed for the guidance of adolescents in their	<ul style="list-style-type: none"> <li>▪ Identify and understand interpersonal skills</li> <li>▪ Understand the process of interpersonal skills</li> </ul>

<p>decision-making about reproductive health?</p>	<ul style="list-style-type: none"> <li>▪ Understand the essence of interpersonal skills as central to the guidance process</li> <li>▪ Understand interpersonal skills as a means of effecting a positive attitude toward adolescents during guidance.</li> </ul>
<p>Are school health nurses aware of the communication skills needed in interpersonal relationships?</p>	<ul style="list-style-type: none"> <li>▪ Delineate and understand types of communication</li> <li>▪ Understand interpersonal communication which is essential to interpersonal relationships</li> <li>▪ Understand interpersonal communication skills and their application</li> <li>▪ Identify and understand the requirements for interpersonal communication competence</li> <li>▪ Identify and understand factors influencing interpersonal communication</li> </ul>



***Step three: Specify the assessment design***

Assessment questions determine the nature of design which invariably determines the timing of data collection. Status design was adapted for use in respect of the assessment of the outcome. Status design helps in establishing what is happening currently (here and now) in the course of programme implementation. This type of design makes use of direct observation as a means of gathering outcome evidence. In addition, the use of self-reports (semi-structured interviews) were also considered for articulating their opinions about the programme, its delivery, methods, conduct of the facilitator and assistants, and environment. Direct observation is a means of collecting assessment data as this procedure entails watching interactions, processes, or behaviour as they occur. Individuals performing tasks or engaging in activities are watched directly (CDC: 2008: 1).

### Advantages of direct observation

- It allows for information collection directly which is the best for human behaviour
- The reliability of the data collected is very high
- The observer is less dependent on the respondents for information
- It enhances understanding of verbal response from individuals being observed

### Disadvantages of direct observation

- Difficulty of using this method to study past events
- Difficulty in studying opinion
- It is time consuming as one has to wait for the events to be observed to occur
- There is a danger of the “Hawthorne” effect. Individuals are more inclined to perform better if they sense that they are being watched
- It is prone to bias on the part of the observer

### Self-report

It is a means of collecting data for assessment purposes from respondents which entails asking individuals for information directly. It is a useful method in appraising the out of programme implementation. The strategies involved in self-report include semi-structured interviews for a qualitative approach (Barker; Pistrang; & Elliott, 2005: 94).

### Advantages of self-report

- Respondents’ views are sourced directly from them
- It allows evaluator or a researcher to gain direct access to respondents’ perceptions or experiences

### Disadvantages of self-report

- It raises validity problems as the responses are subjective

- There may be lack of faithfulness on the part of respondents

The purpose of this training programme was to assist school health nurses with adequate knowledge and skills required for guiding adolescents in decision-making about reproductive health. It follows that their activities, conduct and response to the programme during implementation have to be observed and documented so as to know whether the methods of programme delivery met the expectations of the participants. It is also a means of establishing whether they have a significant interest in the programme or not.

#### ***Step 4: Create the data collection and action plan***

Data on the implementation of the training programme will be sourced from the programme participants (who are the school health nurses), three observers, an assistant facilitator and the facilitator (who happens to be the researcher). Information collection will be ongoing as the observers will be documenting what they watch before, during and after the programme implementation. There will be an individual interview session shortly after the delivery of the training. In addition, the notes from the observers and the facilitators' comments and observations will further enrich the data needed for the assessment of the training programme.

#### ***Step 5: Collect data***

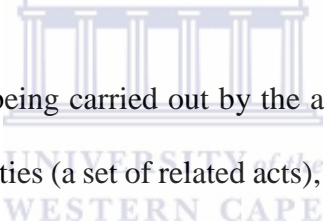
Data will be collected about the learning content and each of the topics. Data will be collected on training methods, participants' activities regarding their preparedness and learning, conduct of facilitators, environment, learning equipment, and the relationship between participants and facilitators while the implementation is going on using methods such as direct observation and semi-interviews for the participants.

### ***Step 6: Analyse data***

Data collected in the previous step (5) will be analysed using different means. The data collected through observation and semi-structured interviews will be analysed using Spradley's 9 categories of phenomena description and inductive content analysis respectively.

#### **Method of analysis of observational data**

The data collected by direct observation will be analysed using an abridged version of Spradley's 9 categories of phenomena descriptive analysis (Whitehead, 2005: 11). These categories are found to be commonplace in any system of human interaction. Information obtained through direct observation will be analysed in detail using the following categories as a guide:

- 
- Actors in the setting
  - The behaviours that are being carried out by the actors which include acts (smallest units of behaviour), activities (a set of related acts), and events (a set of related events)
  - The space occupied by the actors and how they are positioned in the space
  - The objects in that space and how the objects are placed
  - Time of observation
  - Goals related to the conduct of the actors
  - Emotions or feelings attached to the conduct of the actors.

#### **Method of analysis of interviews**

Data collected through semi-structured interviews will be analysed using the inductive content analysis method. Analysis will begin with transcription after which coding process will take place followed by the generation of categories as a result of merging similar things, ideas or events from which themes or patterns emerge (Johnson, 2002:74).

## ***Step 7***

Step 7 requires checking the results cautiously and accurately in order to arrive at conclusions. This has to do with the verdict given regarding programme implementation and achievement of goals. The programme report should cover the following aspects: a lucid picture of the program, the goals and purpose of assessment, assessment questions, and the procedures used in collecting data for each question, the description of instruments for data collection for each question, data providers' descriptions, analysis method, conclusion, and general conclusion which should include the programme findings.

### ***6.3. Specifying procedural elements of the intervention programme***

Specifying procedural elements of the intervention programme constitutes the second operation of the design phase. Findings from the study showed that school health nurses were deficient in the necessary knowledge and skills needed to guide adolescents in decision-making about their reproductive health. There was an express need to bridge the knowledge and skill gap. The examination of different types of intervention programmes that had been developed for school health nurses in their respective areas of practice led to the conclusion that a training programme was the most appropriate intervention that could assist school health nurses in guiding adolescents in making decisions about their reproductive health. Programme elements are the constituents of an intervention programme (Fraser & Galinsky, 2011: 459). The elements for this intervention programme were derived from the findings from phase one of the Intervention Design and Development model and information derived from the information gathering and synthesis phase (Phase 2) which included the use of existing information sources, studying naturally occurring examples and innovations, and the identification of functional elements of successful programmes (Fawcett et al, 2013: 32). Procedural elements may include the use of information, skills and training for their acquisition, environmental change strategies, policy change or enforcement strategies, or reinforcement or punishment procedures (Fawcett

et al, 2013: 35). In effect, specifying programme elements entails creating programme content, facilitation, training methods, and delivery formats (Tennebaum and Yurkl, 1992: 399).

### 6.3.1 Facilitation

Facilitation entails efforts made by an individual or a group of individuals toward getting the learning content across to the trainees using the necessary resources and inputs toward achieving this end and through motivation and encouragement (Burnard, 1989: 100). The stages involved in facilitation according to Burnard (1989:100), are as follows:

- Setting the learning climate
- Identifying learning resources
- Running the learning group
- Closing the group

#### *Stages of facilitation*

##### Setting the learning climate



This entails establishing an appropriate environment for learning. Simply put, it is a place where learners can benefit from learning activities. It should be devoid of distractions and quiet with good ventilation. Learners should feel comfortable in such an environment. The chairs and desks should be arranged in a circular form as to promote some degree of equality in status between the facilitator and learners. The facilitator may use ice-breakers such as asking the group to get involved in some activity that will aid in relaxing them.

##### Identifying learning resources

Facilitator should identify individuals among the learners who can be useful toward enhancing learning activities. Facilitator may identify an individual with good role play skills, or group leadership skills. This helps the facilitator in devolving the locus of control to the group itself.



## Running the learning group

This involves setting the activities in motion. The facilitator acquaints the learners with the expectations of the day. He or she describes the activities and exercises such as discussions or role play. The opening topic is introduced and comments about their familiarity with it may be invited.

## Closing the group

This takes place at the end of the day's activities. It is a way of unwinding for the day. This may take a form of the day's learning activities. Comments may be sought from some of the participants regarding the delivery of the content, what they have gained, what they expected to learn but felt they did not.

## *Qualities of a good facilitator*

UNESCO (2008: 3) lists the qualities a good facilitator should possess as follows:

- Well-developed communication and social skills
- Knowledge of the target group that requires a training programme
- Being able to relate and work with different individuals with diverse ideas or values
- Remaining focused in the role of facilitator
- Possessing knowledge of the means of putting a target group to action
- Understanding the coping abilities of the different individuals who make up the target group
- Possessing skills to help attain the set goals
- Being able to monitor, evaluate and sum up the outcome of a training programme

### 6.3.2 Teaching/Instructional methods

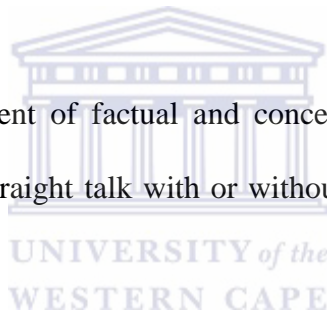
There are three categories of teaching methods: expositive, application and collaborative. Each of these approaches use different methods of conveying a message to learners (Ghirardini, 2011: 44)

#### *Expositive approach*

Expositive approach entails the absorption of fresh information from the facilitator to the learners during programme implementation. The content topics constitute the information which school health nurses will acquire. It becomes translated into knowledge. The method of passing the information is through a lecture or presentation.

#### Lecture/Presentation

It is used in facilitating attainment of factual and conceptual knowledge, orientation and attitudinal change. It enables a straight talk with or without learning aids but without group participation.



#### Advantages of lecture/presentation

- Quick to develop
- It saves time
- It enables the lecturer to deliver much more material within a relatively short space of time
- It can accommodate the needs of many learners at one time
- It enables the handler to achieve full control of the class.

#### Disadvantages of lecture/presentation

- Lesser degree of interaction
- Passivity of learners

- Learners may not be able to remember much of what was said
- There might be little response from the learners.

#### Delivery format for lecture

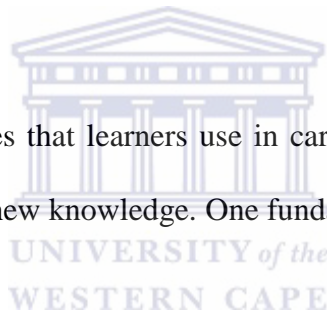
- Simple learning resources (documents, books, journal articles both hard-copy and electronic)
- Power point presentation through the use of computer and projector.

#### Facilitator's role

- Provision of information to the learners
- Answer questions asked by the learners.

#### *Application method*

This involves the active processes that learners use in carrying out technical and principle-based activities in order to build new knowledge. One fundamental means of achieving this is role play.



#### Role play

It is a situation where participants act out roles according to case studies with which they are presented in a given situation. In a role play, there is a role and counter role. School health nurses will be encouraged to act out how they will provide guidance to adolescents on their decision-making in reproductive health. Some school health nurses will actually act the role of school health nurses while some will play the role of an adolescent seeking guidance on reproductive issues that require decision-making.

#### Advantages of role play

- It helps in skill acquisition regarding the case scenario
- It also helps in acquiring interpersonal skills

- It also stimulates a change in attitude of particular individuals or groups.

#### Disadvantages of role play

- Some individuals may feel shy to participate
- There may be apathy on the part of observers
- It is likely to take time to prepare
- The audience may not benefit as much as the participants in the role play.

#### Delivery format for role play

- Interactive sessions
- Case-based scenarios which relate to true-to-life decision-making conflicts in reproductive health as experienced by adolescents.

#### Facilitator's role

- Selecting an appropriate story to illustrate main points.
- Discussing issues and ideas that emerged from it.

#### *Collaborative method*

Collaborative approach encompasses social aspects of learning which focus not only on knowledge but on the promotion of interpersonal relationships through interactive learning effected through discussions.

#### Discussions

These are a means of acquiring knowledge through interactive inputs from different members that make up the group. School health nurses will share their respective contextual experiences

regarding their practice and activities toward guiding adolescents in their decision-making on reproductive health.

#### Advantages of discussions

- They trigger critical thinking and reflective activities
- They promote communication among learners
- They develop interpersonal skills
- They encourage attitudinal change

#### Disadvantages of discussions

- Some individuals may dominate the discussions
- There may be distractions through pairing of members within the group
- The method requires learners to have knowledge of the issue discussed
- It is time-consuming

#### Delivery format for discussions

- Discussion forum

#### Facilitator's role

- Assist in choosing a moderator and rapporteur among the members based on his or ability to identify members that are resourceful.
- Specify the tasks for the group.
- Set the time limit for discussions to take place.

### 6.3.3 Managing group dynamics during programme implementation

Group dynamics occur among members in a group as a result of their interactions and role relationship (Nazzararo & Strazzabosco, 2009: 2). Group members, over time, undergo some processes which include *forming*, which has to do with orientation of members toward their expectations and *storming*, which borders on taking on leadership roles or taking on different roles within the group. Some of the roles are negative while some are positive. *Norming and performing* are other processes that require more commitment to the group goals. There is cohesion among the members of the group. *Transforming* is the last process which encompasses disengagement after the realisation of the group goals. It is assumed that the group goals have been achieved (Gunn, 2007: 17). Some characteristics are identified with group dynamics as these include participation, communication, collaboration, influence, trust, cohesiveness and empowerment (Greenlee & Karanxha, 2010: 357). In the course of the emergence of these processes there are likely to be some challenges and tensions. The group facilitator should possess the requisite skills to address them. Some of likely problems and challenges that could arise out of the group activities include pairing, scapegoating, projecting, wrecking, or the development of hidden agendas (Burnard, 2013: 129).

#### *Pairing*

Pairing arises when two members of the group are discussing quietly with each other, and are oblivious of what is happening within the group as a whole. The implication of this is that the group is not operating as a unit.

#### Facilitator' intervention

- Ignoring the incident which occasionally is self-limiting
- Confronting the persons involved in a subtle manner
- Changing of seats as a form of ice-breaker may be suggested

- Engage one of the pair in discussion.

### *Scapegoating*

Scapegoating occurs when an individual within a group becomes the object of attack for whatever reason. This may cause the member to withdraw, especially a vulnerable person.

#### Facilitator's intervention

- Call the attention of group to this and allow them to address it
- Changing the course of discussion
- Stop the harassment outright
- Explore the feelings of the scapegoat regarding the incident.

### *Projecting*

Projecting takes place when an individual identifies the mood of the group and uses it as a platform to vent his or her emotions. This situation may cause others to withdraw as the individual may say things that discourage their commitment and further participation in group activities.

#### Facilitator's intervention

- Ignore and look for reactions
- Call the attention of the group to it and let them interpret the situation

### *Wrecking*

Wrecking is a way of undermining the group's activities by consistently disagreeing with whatever the facilitator says. The individual concerned may decline his participation in group activities which, if not properly addressed, may send a negative signal to others.

#### Facilitator's intervention

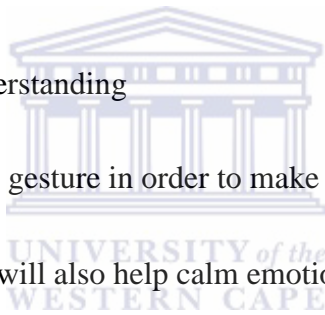
- There should be a direct confrontation by the facilitator
- The group's attention should be drawn to the incident
- The individual may be spoken to concerning the issue to reach an understanding.

### *Shutting down*

Shutting down could also be caused by the group dynamic processes. It entails the indifferent disposition of a member to the activities of the group. The loss of interest in the activities could result from the interplay of factors such as goal lack of understanding or psychosocial problems.

### Facilitator's intervention

- Showing an empathic understanding
- Offering a simple physical gesture in order to make him or her feel appreciated
- Verbal acknowledgement will also help calm emotions.



### *Hidden agenda*

A hidden agenda is the covert aim of an individual in a group. The aim may not be known to others and the individual will be subtly working toward its accomplishment. This may be personal as it affects his or her emotions, interpersonal which may be to gain recognition or leadership roles within the group, or work agenda which entails work processes and goals. Hidden agendas may affect the group positively or negatively depending on the direction of the group's goals.

### Facilitator's intervention

- Allow the agenda to play itself out
- Ask group members to explore the hidden agenda that may be arising.



### 6.3.4 Content development

The content for the training programme was created by carrying out content identification through the use of task analysis and topic analysis methods (see chapter three for details). Task analysis focuses on areas designed to develop specific job-related or interpersonal skills while topic analysis is suitable for topics that are largely created to provide information (Ghirardini, 2011: 30). Put differently, the task analysis method helps in creating topics that are job-centred, focused on skills acquisition, and also help in crafting case-based situations which are analogous to real-life scenarios. Topic analysis focuses on identifying content and its elements. School health nurses require knowledge of both the decision making processes and skills by adolescents, and the possession of skills needed to carry out the guidance activities. The topics and their elements were put in modules for ease of presentation and clarity. Content developers came up with six modules with each module covering every segment of the intervention based on the outcome of findings in phases one and two of this study (see chapters four and five). In addition, a list of references was generated in order to identify the sources of information used to develop the content of the module. The following modules were created with their respective content and elements.

- *Module 1: Roles and Responsibilities of School Health Nurses*

- 1.1 School health policy

- 1.2 Roles of school health nurses

- 1.3 Responsibilities of school health nurses

- *Module 2: Concept of Adolescence*

- 3.1 Stages of adolescent development

- 3.2 Theories of adolescence

- *Module 3: Reproductive Health*

2.1 History of reproductive health

2.2 Reproductive Rights

2.3 Components of reproductive health

2.4 Programme components of reproductive health

2.5 Factors affecting reproductive health

2.6 Overview of male and female reproductive systems

2.7 Adolescent reproductive health

2.9 Programme activities of adolescent reproductive health

- *Module 4: Adolescent decision making*

4.1 Decision making models

4.2 Adolescent decision-making theories

4.3 Adolescent decision-making processes in reproductive health

4.4 Decision-making skills

4.5 Factors influencing adolescent decision-making in reproductive health

- *Module 5: Guidance*

5.1 Emergence of guidance

5.2 Types of guidance

5.3 Principles of guidance

5.4 Theoretical perspective of guidance

## 5.5 Guidance process

- *Module 6: Interpersonal Communication*

### 6.1 Types of communication

### 6.2 Features of communication

### 6.3 Principles of communication

### 6.4 Modes of communication

### 6.5 Models of communication

### 6.6 Process of communication

### 6.7 Communication competence

## 6.4 SUMMARY

This chapter looked at the processes involved in creating the design of an intervention programme. There were two activities inherent in this phase. These are: designing an observational system, and specifying the procedural elements. An observational system entails the processes and outcomes of an intervention programme during and after its implementation. Simply put, the importance of this is to establish quality and results which will be used to improve the intervention programme. Specifying procedural elements covered a range of activities such as creating learning content, description of methods of delivery, facilitation, delivery formats, and managing group dynamics among group members that would be participating in the programme implementation.

## **CHAPTER SEVEN: DEVELOPMENT OF AN INTERVENTION PROGRAMME**

### **7.1 INTRODUCTION**

Development and pilot testing constitute the fourth phase of the intervention design and development model (Thomas & Rothman, 2013: 9). Early development entails developing a prototype that will be used in pilot testing. The activities in both design and early development, and pilot testing phases are interwoven (Fawcett et al, 2013: 36). The fifth research objective, which focuses on developing an appropriate intervention programme for school health nurses on guiding adolescents in decision-making in reproductive health, was addressed by the activities of this phase. The procedural elements identified in the design phase were advanced further to a full scale training programme. Development of the training programme took cognizance of the fact that school health nurses are adult learners, and also that they learn by using different styles. The content, learning methods, learning materials and resources, activities and facilitator's roles were described as all these constitute the core of a training programme aimed at enhancing school health nurses' knowledge and skills needed for guiding adolescents in their decision-making about reproductive health.

### **7.2 A TRAINING PROGRAMME TO ASSIST SCHOOL HEALTH NURSES ON GUIDING ADOLESCENTS IN DECISION-MAKING ABOUT REPRODUCTIVE HEALTH IN IJEBU ODE LOCAL GOVERNMENT**

Findings from data analysis emanating from the problem analysis and project planning phase (phase one) of the Intervention Design and Development model (details in chapter four) show that school health nurses lack knowledge about adolescents' decision-making process, and also the necessary skills in the area of guiding adolescents in their decision-making about reproductive health. This situation necessitates an intervention which takes the form of a training programme for school health nurses. School health nurses are nursing professionals working in the school environment toward promoting the health of adolescents, especially their

reproductive health. The over-arching aim here is to reduce the rates of mortality and morbidity occasioned by the failure of adolescents to make responsible decisions about their reproductive health.

### **7.2.1 Evolution of training**

Training is defined as “that organised process concerned with the acquisition of capability or the maintenance of capability” (Pepper, 1984: 9). Over the years, the essence of work-based training has been found to be essential to knowledge and skills acquisition. Work-based training predates universal education. In the past, younger members of society were trained for one kind of task or the other, and this functioned as one of many adaptive responses to the needs of the humanity. It is a clear demonstration of the capacity of higher primates to undertake higher cognitive activities. In Europe, the norm during the fourteenth century was an apprenticeship system of learning a trade, skill or craft, and the acquired skills were passed on to succeeding generations. This kind of training was provided by the employer and constituted the first kind of formalized training and development (Cartwright, 2003: 16). This period witnessed the rise of guilds whose membership was drawn from among artisans. These guilds served as the gatekeeper in accessing specialised skills and knowledge. The membership of guilds was three-pronged; there were masters, journeymen and apprentices. The masters owned the materials and equipment, and sold the products for profit. The journeymen and apprentices lived in the master’s house. The apprentices were the beginners learning the trade under the direction of the master. They received bed and board in return for the work they did. There was, in many cases, an indenture which served as the basis of the relationship between apprentice and master (Cartwright, 2003: 17). After the completion of the term the apprentice became a journeyman. This status entitled him to fixed wages, and from here he progressed to become a master. During the industrial revolution when there was a leap in technological progress and consequent migration of labour, there arose a need to train workers, especially

those who had left the agricultural sector in search of employment in the mechanical and engineering trades. There was also a need to train workers for steam and electricity technologies. This category of workers included engineers and designers. The import of training in modern-day organisations is as high as it was during the earliest times. Skills acquisition and maintenance should be part of the organisational plan (Cartwright, 2003: 18).

### **7.2.2 Purpose of the training programme**

School health nurses are strategically placed in the school environment to function optimally in influencing a positive outcome for adolescent reproductive health. However, they are handicapped in performing this role due to their inadequate knowledge and skills in this area (see findings in chapter five). Adolescents need to be well guided in making responsible decisions on reproductive health. School health nurses, as frontline health providers, as is shown in the research findings of this study, need to be assisted in performing the role of guiding adolescents in decision-making about reproductive health. The training programme, as a form of intervention, was designed to assist in equipping school health nurses with the necessary knowledge and skills they require in order to enhance this role.

### **7.2.3 Competencies to achieve the goal**

The goal of enhancing school health nurses' competency in this area could only be achieved if the necessary knowledge, skills and attitude required by them (school health nurses) are provided. These competencies justify the essence of the training programme.

**TABLE 7.1: ICONS USED IN THE EXPLICATION AND TEXT OF THE TRAINING PROGRAMME**

ICON	MEANING
	Facilitator
	Reading
	Activity and search
	Lecture
	Discussion
	Role play
	Facilitator's role

### 7.3. LAYOUT OF THE TRAINING PROGRAMME

The training programme has a modular design consisting of study units, contents, learning materials and allocated time frames. Six modules were developed for the purpose of this training programme (See table 7.2). Each module covers every important segment of knowledge, skills and attitudes needed by school health nurses to be able to effectively guide adolescents on how to make wise decisions about reproductive health. Icons were used to depict the landmarks of the training modules (See table 7.1).

**TABLE 7.2: SUMMARY OF TRAINING MODULES**

<b>SECTION 1: KNOWLEDGE COMPONENT</b>				
<b>Module</b>	<b>Study unit</b>	<b>Content</b>	<b>Learning material</b>	<b>Duration</b>
<b>Module One</b>  Roles and responsibilities of school health nurses	<b>Study unit 1.1</b>  Overview of National School Health Policy	<ul style="list-style-type: none"> <li>• School health policy goals</li> <li>• School health policy objectives</li> <li>• Scope of the school health programme</li> <li>• Objectives of school health services</li> <li>• Characteristics of school health services</li> <li>• Role of stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Federal Ministry of Education (2006a). National School Health Policy. Federal Ministry of Education, Abuja</li> <li>• Federal Ministry of Education (2006b). Implementation guidelines on national school health programme. Federal Ministry of Education, Abuja</li> </ul>	1 hour
	<b>Study unit 1.2</b>  Role expectations of school health nurses	<ul style="list-style-type: none"> <li>• Provision of direct care to students</li> <li>• Provision of healthy environment</li> <li>• Promotion of health of students</li> <li>• Provision of effective counselling services</li> </ul>	<ul style="list-style-type: none"> <li>• Federal Ministry of Health (1995). Standing orders for community health officers and community health extension workers. Federal Ministry of Health, Lagos</li> <li>• Federal Ministry of Education (2006a). National School Health Policy. Federal Ministry of Education, Abuja</li> <li>• Federal Ministry of Education (2006b). Implementation guidelines on national school health programme. Federal Ministry of Education, Abuja</li> <li>• <a href="http://www.pediatrics.aappublications.org/content">http://www.pediatrics.aappublications.org/content</a> Role of the school nurse</li> </ul>	1 hour



		<ul style="list-style-type: none"> <li>Acting as liaison between parents and school personnel</li> <li>Provision of referral services</li> </ul>	<ul style="list-style-type: none"> <li><a href="http://www.nphcda.gov.ng">http://www.nphcda.gov.ng</a>. Minimum standards for primary health care in Nigeria</li> </ul>	
<b>Module Two</b> Concept of adolescence	<b>Study unit 2.1</b> Overview of adolescence	<ul style="list-style-type: none"> <li>Definition and meaning of adolescence</li> <li>Cultural perspectives of adolescence</li> <li>Stages of adolescence</li> </ul>	<ul style="list-style-type: none"> <li><a href="http://www.unicef.org/sowc2011">http://www.unicef.org/sowc2011</a>: Adolescence, an age of opportunity</li> <li><a href="http://www.human.cornell.edu/act">http://www.human.cornell.edu/act</a>. Stages of adolescent development</li> <li><a href="http://www.pearsonhighered.com/assets">http://www.pearsonhighered.com/assets</a>. Adolescence</li> <li><a href="http://www.nsvrc.org/saam">http://www.nsvrc.org/saam</a>. An overview of adolescent sexual development</li> </ul>	1 hour
	<b>Study unit 2.2</b> Theories of adolescence	<ul style="list-style-type: none"> <li>Biological theory of adolescence</li> <li>Psychosexual theory of adolescence</li> <li>Psychoanalytic theory of adolescence</li> <li>Cognitive theory of adolescence</li> </ul>	<ul style="list-style-type: none"> <li><a href="http://www.rhodeslab.org/files/lectures">http://www.rhodeslab.org/files/lectures</a>. Theories of adolescence</li> <li><a href="http://www.psyking.net/id183.htm">http://www.psyking.net/id183.htm</a>. Adolescence: Overview, history, theories</li> <li><a href="http://www.researchgate.net">http://www.researchgate.net</a>. Autonomy development during adolescence</li> <li><a href="http://www.researchcooperative.org/profiles">http://www.researchcooperative.org/profiles</a>. Theories of adolescence: Some analytical considerations</li> </ul>	1 hour

<b>Module Three</b> Reproductive health	<b>Study unit 3.1</b> Overview of reproductive health	<ul style="list-style-type: none"> <li>• Historical development of reproductive health</li> <li>• Reproductive health rights</li> <li>• Reproductive health components</li> <li>• Overview of male and female reproductive tracts</li> <li>• Factors influencing reproductive health</li> </ul>	<ul style="list-style-type: none"> <li>• Glasier, A; Gulmezolu, A.M, Schmid, G.P and Moreno, C.G (2006). Sexual and reproductive and reproductive health care: A matter of life and death. <i>The Lancet sexual and reproductive health series</i>, 1-13</li> <li>• Omobuwa, O; Asekun-Olarinmoye, E.O and Olajide, F.O (2012). Knowledge and perspectives of reproductive health services among in-school adolescents in Ile Ife, Osun State, Nigeria. <i>Journal of Medicine and Medical Sciences</i>, vol. 3, no. 7, pp. 481-488.</li> </ul>	1 hour
	<b>Study unit 3.2</b> Adolescent reproductive health	<ul style="list-style-type: none"> <li>• Components of adolescent reproductive health</li> <li>• Factors influencing adolescent reproductive health</li> </ul>	<ul style="list-style-type: none"> <li>• UNFPA (2004). Programme of action; adopted at the International Conference on Population Development, Cairo, 5-13 September, 1994</li> <li>• <a href="http://www.actionhealthinc.org">http://www.actionhealthinc.org</a>. Adolescent sexual and reproductive health in Nigeria</li> <li>• <a href="http://www.jahonline.org">http://www.jahonline.org</a>. Sexual and reproductive health care: A position paper of the Society for Adolescent Health and Medicine</li> <li>• <a href="http://www.un.org/popin/icpd/conference">http://www.un.org/popin/icpd/conference</a>. ICPD programme of action</li> </ul>	1 hour

<p><b>Module four</b></p> <p>Adolescent decision-making</p>	<p><b>Study unit 4.1</b></p> <p>Overview of decision-making process</p>	<ul style="list-style-type: none"> <li>• Models explaining decision-making process</li> <li>• Differences between models</li> </ul>	<ul style="list-style-type: none"> <li>• Gordon, C.P (1996). Adolescent decision-making: A broadly based theory and its application to the prevention of early pregnancy. <i>Adolescence</i>, 31 (123) pg. 561</li> <li>• Reyna, V and Farley, F (2006). Risk and rationality in adolescent decision-making: Implications for theory, practice and public policy. <i>Psychological Science in the Public Interest</i>, vol. 7, no.2, pp.1-44.</li> <li>• Steinberg, L (2007). Risk taking in adolescence: New perspectives from brain and behavioural science. <i>Current Directions in Psychological Science</i>, vol.16, no.2, pp. 55-59.</li> <li>• Blakemore, S-J and Robbins, T.W (2012). Decision-making in the adolescent brain. <i>Neuroscience</i>, vol. 15, no. 9, pp. 1184-1191.</li> <li>• Dustin, A; Chein, J and Steinberg, L (2013). The teenage brain: Peer influences on adolescent decision-making. <i>Association for Psychological Science</i>, vol. XX, no. X, pp. 1-7.</li> <li>• <a href="http://www.sciencedirect.com">http://www.sciencedirect.com</a>. A dual-process approach to health risk decision-making: The prototype willingness model</li> </ul>	<p>2 hours</p>
	<p><b>Study unit 4.2</b></p> <p>Adolescent decision-making process</p>	<ul style="list-style-type: none"> <li>• Adolescent decision-making models/theories</li> <li>• Process of decision-making by adolescents</li> </ul>	<ul style="list-style-type: none"> <li>• Gordon, C.P (1996). Adolescent decision-making: A broadly based theory and its application to the prevention of early pregnancy. <i>Adolescence</i>, vol. 31, no.123, pg. 561.</li> <li>• Reyna, V and Farley, F (2006). Risk and rationality in adolescent decision-making: Implications for</li> </ul>	<p>2 hours</p>

		<ul style="list-style-type: none"> <li>Decision-making skills for adolescents</li> </ul>	<p>theory, practice and public policy. <i>Psychological Science in the Public Interest</i>, vol. 7, no.2, pp.1-44.</p> <ul style="list-style-type: none"> <li>Steinberg, L (2007). Risk taking in adolescence: New perspectives from brain and behavioural science. <i>Current Directions in Psychological Science</i>, vol.16, no.2, pp. 55-59.</li> <li>Blakemore, S-J and Robbins, T.W (2012). Decision-making in the adolescent brain. <i>Neuroscience</i>, 15 (9) pp. 1184-1191</li> <li>Dustin, A; Chein, J and Steinberg, L (2013). The teenage brain: Peer influences on adolescent decision-making. <i>Association for Psychological Science</i>, XX (X) pp. 1-7</li> <li><a href="http://www.sciencedirect.com">http://www.sciencedirect.com</a>. A dual-process approach to health risk decision-making: The prototype willingness model</li> </ul>	
<b>SECTION 2: SKILLS COMPONENT</b>				
<b>Module</b>	<b>Study unit</b>	<b>Content</b>	<b>Learning material</b>	<b>Duration</b>
Module Five Guidance	Study unit 5.1 Introduction to guidance	<ul style="list-style-type: none"> <li>Historical development of guidance</li> <li>Principles of guidance</li> <li>Types of guidance</li> <li>Theoretical perspectives on guidance</li> </ul>	<ul style="list-style-type: none"> <li>Kagan, C and Evans, J (1995). <i>Professional interpersonal skills for nurses</i>. San Diego: Singular Publishing Group Inc.</li> <li>Burnard, P (1996). <i>Acquiring interpersonal skills: A handbook of experiential learning for health professionals</i>. San Diego: Singular Publishing Group Inc.</li> <li>Haddon, P.F.C (1999). <i>Mastering personal and interpersonal skills</i>. London: Thorogood Ltd.</li> <li>Miller, L (2006). <i>Counselling skills for social work</i> London. Sage Publications</li> </ul>	2 hours

	<p><b>Study unit 5.2</b></p> <p>Process of guiding adolescents in decision-making on reproductive health</p>	<ul style="list-style-type: none"> <li>• Building of trust and confidence</li> <li>• Client-centred approach for guidance activities</li> <li>• Interpersonal skills</li> <li>• Guidance steps</li> </ul>	<ul style="list-style-type: none"> <li>• Kagan, C and Evans, J (1995) <i>Professional interpersonal skills for nurses</i>. San Diego: Singular Publishing Group Inc.</li> <li>• Burnard, P (1996) <i>Acquiring interpersonal skills: A handbook of experiential learning for health professionals</i>. San Diego: Singular Publishing Group Inc.</li> <li>• Haddon, P.F.C (1999). <i>Mastering personal and interpersonal skills</i>. London: Thorogood Ltd.</li> <li>• Miller, L (2006) <i>Counselling skills for social work</i>. London. Sage Publications</li> </ul>	3 hours
<p><b>Module Six</b></p> <p>Communication</p>	<p><b>Study unit 6.1</b></p> <p>Good interactions with adolescents and school teaching staff</p>	<ul style="list-style-type: none"> <li>• Types of communication</li> <li>• Features of interpersonal communication</li> <li>• Principles of interpersonal communication</li> <li>• Models of interpersonal communication</li> <li>• Modes of interpersonal communication</li> <li>• Processes in interpersonal communication</li> </ul>	<ul style="list-style-type: none"> <li>• Career Skills Library (1998) <i>Communication skills</i>. New York: Ferguson Publishing Company</li> <li>• Kraszewski, S and McEwen, A. (2010). Communication: Fundamental Skills. In S Kraszewski &amp; A. McEwen (eds.) <i>Communication skills for adult nurses</i>. Berkshire: Open University Press</li> <li>• Wood, J.T (2010) <i>Interpersonal communication: Everyday encounters</i>. Australia: Wadsorth</li> <li>• <a href="http://www.practicebasedlearning.org">http://www.practicebasedlearning.org</a> <i>Communication skills</i></li> <li>• <a href="http://www.bookboon.com">http://www.bookboon.com</a> <i>Effective communication</i></li> </ul>	3 hours

		<ul style="list-style-type: none"><li>• Factors affecting interpersonal communication</li><li>• Interpersonal communication competence requirements</li></ul>		
--	--	---	--	--



## 7.4 MODULE ONE: ROLES AND RESPONSIBILITIES OF SCHOOL HEALTH

### NURSES

#### Purpose of the module

- ❖ To present an overview of the National School Health Policy.
- ❖ To identify the roles and responsibilities of school health nurses based on the National Health Policy.

#### Study unit 1.1: Overview of National School Health Policy in Nigeria

The school health programme, which has the school health service as one of its integral components, is policy driven. The policy stipulates what the school health programme intends to achieve, and how each of the components will be implemented. After this unit, the recipients will:

- Demonstrate an understanding of National School Health Policy as it affects and influences the implementation of school health services.

#### Box one

##### Facilitator's role:



Get the learners ready for the session. Ask recipients of the training whether they are aware of the existence of the National School Health Policy. By probing, the facilitator will elicit from learners the essence of a typical policy statement. The facilitator should ask them to mention the goal and some of the objectives of the national school health policy.

##### Read (Self Study)



Read more on national school health policy in Nigeria and how it affects school health services.

##### Activity/Search



Conduct a search on the internet for relevant papers and documents published on National School Health Policy by the Ministries of Health and Education, for policy statement and guidelines on the implementation of the National School Health Policy. Look for documents from other relevant agencies such as the Nursing and Midwifery Council of Nigeria or the West African Health Examination Board. Information on the implementation of the National School Health Policy can be obtained by visiting the official websites of the following agencies:

- Federal Ministry of Education (2006a). National School Health Policy. Federal Ministry of Education, Abuja
- Federal Ministry of Education (2006b). Implementation guidelines on national school health programme. Federal Ministry of Education, Abuja

### **Group discussion**



Encourage discussion on the topic. Discuss policies generally, and their functions and home in on school health policy. Discuss the goals and objectives of school health policy, the components of the school health programme, and focus in on school health services. Debate the objectives and characteristics of school health services, and the roles of stakeholders. Discuss the implication of practising or not practising in line with policy direction, which may include both legal and professional dimensions. Discuss the success and limitations of the policy.

### **Facilitator' role during discussion**



- Prevent the domination of discussion by a few individuals.
- Encourage every learner to contribute.
- Guide against learners losing the focus of the discussion.



### **7.4.1 Content of the module**

#### ***Nigeria's national school health policy***

The national school health policy in Nigeria came into being in 2006 and aimed at providing direction for the formal institutionalisation of school health services in the school system. The policy statement emphasizes school health services as an essential part of an effective school health programme which focuses on health and learning as it concerns children in the primary and secondary school systems. The slogan “Education for All” can only be realised if the school health service functions properly. The policy further indicates that the school health service should have both preventive and curative dimensions. Besides their benefits to school children, the services should be enjoyed by the staff within the school setting.

#### **Goals of school health policy**

- To augment the quality of health in the school community
- To provide an enabling environment for inter-sectoral partnerships in the provision of a child-friendly school environment.

#### **Objectives of the school health policy**

- To provide a legal framework for the deployment of support for the implementation of school health programmes.
- To establish a mechanism for the coordination of activities among community, government and non-governmental organisations toward the enhancement of a child-friendly school environment.
- To manage the provision of appropriate professional services in schools by stakeholders for school health programme implementation.
- To promote the teaching of skills-based health education.

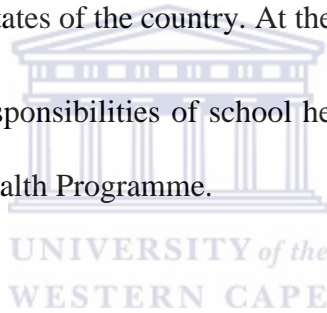
- To enable effective monitoring and evaluation of the school health programme.

The policy further specifies the personnel required for the implementation of the school health service; these include medical doctors, school nurses, health educators, environmental health officers, school guidance counsellors, community health workers, dieticians, nutritionists, school teachers and social workers.

### **Study unit 1.2: Role expectations of school health nurses**

School health nurses are statutorily mandated to fill certain roles and perform certain responsibilities in the school health service. The role definition, expectations and performance requirements in each case will be determined by the direction of the health programme and the needs of each of the component states of the country. At the end of this unit, participants will:

- Describe the roles and responsibilities of school health nurses in terms of the policy direction of the School Health Programme.



#### **Box two**

##### **Facilitator's role:**



Get the venue ready for the lesson. Minimize distractions in terms of movements and surrounding activities. Position audio-visual materials where they will be beneficial to the learners. Tell a short and interesting, but relevant story to capture their attention. Introduce the topic to the learners. Assess their background knowledge by inviting their contributions on the issue.

##### **Read/Search (Self Study)**



Read more about the national health policy implementation and the implementation guidelines. Read position and technical papers and presentations by various agencies responsible for school health services and how the school health nurses' roles were delineated.

##### **Activities**



Search the internet for the National Association of School Nurses' position statement on roles and responsibilities of school health nurses, and other informational materials on roles and responsibilities of school health nurses. The following texts and websites will be useful in meeting the desired expectations:

- Federal Ministry of Health (1995). Standing orders for community health officers and community health extension workers. Federal Ministry of Health, Lagos.
- Federal Ministry of Education (2006a). National School Health Policy. Federal Ministry of Education, Abuja
- Federal Ministry of Education (2006b). Implementation guidelines on national school health programme. Federal Ministry of Education, Abuja
- <http://www.pediatrics.aappublications.org/content> Role of the school nurse
- <http://www.nphcda.gov.ng>. Minimum standards for primary health care in Nigeria

### Group discussion



Ask group members to debate what they consider as their roles and responsibilities in their practice context. Encourage them to compare and contrast notes on what they do in their respective school environments. Discuss how these differences affect their individual practice. Discuss the attempts they have made to harmonise their roles and responsibilities. Discuss how adolescents who are the major beneficiaries of their services perceive their roles and responsibilities. Allow learners to reflect on the issues discussed in order to stimulate further discussions.

### Facilitator's role during discussion



- Prevent the domination of discussion by a few individuals.
- Encourage every learner to contribute to the discussion.
- Provide information where necessary.
- Guide against losing the focus of the discussion.

## 7.4.2 Content of the module

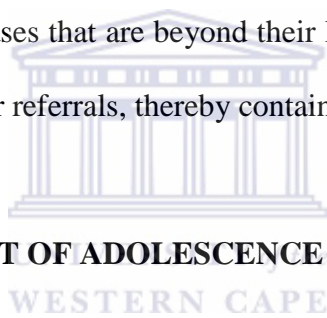
### *School health nurse's roles and responsibilities*

From the objectives of the school health policy indicated above, the following roles and responsibilities emerged, to which school health nurses are expected to adhere in order to achieve maximum health potential among school adolescents.

- Provision of direct care to students. School health nurses provide care for injuries and sudden ailments for all students in the school environment. Their responsibilities stretch across the use of the nursing process to define and treat ailments. They communicate the outcome of their intervention and the prognosis to parents.
- Provision of healthy environment. School health nurses ensure the cleanliness of the school environment, and personal hygiene. This is achieved through health talks on how to maintain a clean environment. Through this, the incidence of snake bites will be reduced. The incidence of malaria will be reduced by the clearing of stagnant water from the school grounds. School health nurses help in the prevention of school violence by collaborating with school authorities on how to keep the excesses of senior students in check.
- They promote the health of students by educating them on how to maintain their physical and psycho-social well-being. This requires that school health nurses educate adolescents on the kinds of food that can be helpful to them, the management of puberty and its attendant issues through adequate guidance on how they can make informed decisions and choices in the area of their reproductive health. The importance of exercise needs to be emphasised. School health nurses play a dominant role in discouraging substance abuse among adolescents.
- School health nurses act as liaison between parents or the community and school personnel, health care professionals. They allow for mutual communication of needs,

concerns and expectations among the various interest groups. School health nurses represent schools on the community health committee or local government health committee, and various other committees that make input into the school health service.

- School health nurses are expected to rise to the leadership role in the context of inter-professional activities of the school health service. They coordinate the activities of other professionals in working toward effective health care services. They liaise with school counsellors in providing guidance to adolescents in the various aspects of their endeavours such as reproductive health. Problems such as substance abuse, violence and bullying are also given attention.
- School health nurses make referrals to health centres or hospitals where comprehensive care is provided for the cases that are beyond their legal scope and competence. They make prompt decisions for referrals, thereby containing and averting crises.



## **7.5 MODULE TWO: CONCEPT OF ADOLESCENCE**

### **Purpose of the module:**

- ❖ To explore the concept and the implications of adolescence

### **Study unit 2.1: Overview of adolescence**

Adolescents constitute a vulnerable group and their centrality to this study occasioned the development of a training programme for school health nurses as to how they (adolescents) could be effectively guided by school health nurses in their decision-making on reproductive health. After this study unit, the learners will:

- Describe the meanings and stages of adolescence

### Box three

#### Facilitator' role



Tap the background knowledge of the learners by asking them to give the meaning of adolescence. Ask them to differentiate between *adolescence* and *adolescent*.

#### Lecture



Teach the recipients the definition and meaning of adolescence, the cultural perspectives of adolescence, and stages of adolescence. Employ the use of audio-visual aids like posters and vignettes on adolescence. Extend the lecture to cover the stages such as early, middle and late adolescence indicating physical and emotional features of these stages. Compare male and female developmental features.

#### Read (Self Study)



Read more about adolescence, and differentiate between the physical and emotional features of early, middle and late adolescents two weeks before the commencement of the workshop.

#### Activity/Search



Ask learners to consult more materials on adolescence. Encourage them to learn more on cultural perspectives of adolescence in selected societies, and the implications of these on their health, especially their reproductive health. Read more about adolescence by searching the following websites:

- <http://www.unicef.org/sowc2011>: Adolescence, an age of opportunity
- <http://www.human.cornell.edu/act>. Stages of adolescent development
- <http://www.pearsonhighered.com/assets>. Adolescence
- <http://www.nsvrc.org/saam>. An overview of adolescent sexual development

#### Group discussion



Discuss and review the lecture on stages of adolescence. Generate discussion on their features and peculiarities. Compare the activities of adolescents in your various schools. Discuss the differences

and similarities in their conduct. Discuss the influence of their respective environmental situations on them. Compare the influence of peers and parents on their activities.

### **Facilitator's role during discussion**

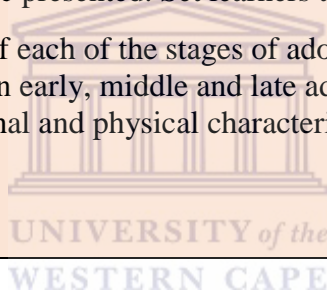


- Guide them toward following the rules of discussion.
- Make the group dynamics that have developed, work positively for the group.
- Check the excesses of any member violating the ground rules.
- Provide clarification where they get stuck during the discussion.
- Assist them to reflect on the issues that they will discuss as this may provoke more discussions, by asking questions that relate to their experiences.

### **Note to the Facilitator**

The facilitator should prepare well for the lecture and discussions on the topic “concept of adolescence” by consulting a wide range of reading materials from textbooks to journal articles in order to equip himself/ herself on contemporary issues relevant to adolescence. The facilitator should ask questions on the topic presented. Set learners the following questions:

- ❖ Give the age range of each of the stages of adolescence.
- ❖ Differentiate between early, middle and late adolescence.
- ❖ Describe the emotional and physical characteristics of each stage.



## **7.5.1 Content of the module**

### ***Adolescence***

Adolescence is a period of growth and development between childhood and adulthood. In concrete terms it is a period between 10 and 19 years. An individual in this period of their life is known as adolescent (WHO, 2016).

The population of present day adolescents appears to be the largest in history, their world population having reached 1.2 billion. Adolescents are gaining more attention from various governments and communities due to the complexity identified with the stage. This is the stage they their sexual features become pronounced and their sexual feelings expressed. This is also

the period in which they form and develop their identity as well as their preoccupation with their independence.

### *Adolescent developmental stages*

Adolescence can be sub-divided into three stages in order to accurately delineate the events that stretch throughout the period. Each stage is marked by landmarks which underscore the behavioural tendencies of individuals in those stages. There is no clear-cut demarcation in the activities identified with each stage and there could be some overlap.

#### Early adolescence (10-14 years)

This period is marked by an agitation for independence. Adolescents do this in vocal and other ways to prove their ability. They tend to align more with peers than parents or other members of their family. They see a show of impertinence as a means of gaining their freedom. They begin to realise that their parents are not perfect after all. They tend to look for new friends and are externally focused. Interests grow regarding life choices in relation to career and ability to work. The individuals in this stage experience increases in height and weight, the appearance and the growth of pubic and underarm hair, increased perspiration and body odour. Girls further experience breast development and menstruation while boys' testicles and penis increase in size, and there may be nocturnal emissions (wet dreams), in addition to the deepening of the voice and the growth of hair on the face. This is also the stage they experiment with smoking, alcohol or marijuana. They tend to break the rules and limits set by their parents.

#### Middle adolescence (15-16 years)

This is the stage where there are ambivalent feelings of success and failure, and zero tolerance for parental interference in their affairs. They become more concerned about their own interests and bodies. They seek comfort in the presence of friends. They are more engaged in intellectual exploration and their sexual aggressiveness is channelled into creative and career concerns.



They demonstrate more interest in sexual attractiveness and relationships. Sometimes these relationships are unstable. Their sexual orientation begins to take on a clearer pattern. There is a feeling of love toward those with whom they have an affinity. The physical growth of boys increases especially in height and weight, while that of girls slows down, especially after experiencing their menarche. This is the stage they pick their role models. Put differently, they model their habits on those of individuals whose behaviours have appeal for them. They exhibit more interest in moral reasoning, and their goal setting capacity increases.

Late adolescence (17-19years)

This is the stage that is contiguous with early adulthood. They have a well-defined identity and may be making decisions regarding the career they will pursue. They are fully capable of syllogistic thinking i.e. they can reason in the abstract. Their emotions are stable, and they are capable of making independent and responsible decisions. They become more future-oriented. Their work habits become more clearly pronounced. They show more interest in serious relationships against the backdrop of distinct identity. In addition, they get more involved in tender and sensual love. Physically, most girls are completely developed while boys exhibit increased weight, height, muscle bulk and body hair. They are more ethically driven in the areas of acceptance of religious and cultural values, and greater interest is shown in protecting their dignity and self-esteem. They are capable of setting and pursuing goals.

### **Study unit 2.2: Theories of adolescence**

Theories constitute the conceptual lens of explaining issues and phenomena for the purpose of clear understanding. Adolescent theories are multi-dimensional since one single theory cannot capture all the features and activities of this stage of life. After the study unit, the learners will:

- Demonstrate an understanding of theories of adolescence by being able to identify and describe them.

## Box four

### Facilitator's role



Ask learners if they understand the meaning of theory, and its functions. Ask them to mention some theories of adolescence they know. Tell them to relate their knowledge of theories to adolescence.

### Lecture



Identify the theories that can be used to explain adolescence. These are biological, psychosexual, cognitive, and psychosocial theories. Describe the focus of each of the theories, and the relationships among them. Use audio-visual materials to assist in your teaching. Allow for questions and clarification during the lecture. Highlight the components of each theory, and draw out the differences and similarities, and relate them in a way that will help learners to make sense of the content.

### Read (Self Study)



Tell learners to read more about the theories of adolescence. They can use their knowledge of theories to explain adolescents' activities in their respective school environments.

### Activity/Search



Do more internet search on resources that relate to adolescence including theories. Visit the following websites, and consult texts that address adolescence.

- <http://www.rhodeslab.org/files/lectures>. Theories of adolescence
- <http://www.psyking.net/id183.htm>. Adolescence-overview, history , theories
- <http://www.researchgate.net>. Autonomy development during adolescence
- <http://www.researchcooperative.org/profiles>. Theories of adolescence: Some analytical considerations

### Group discussion



Encourage discussion on theories of adolescence. Focus the discussion on the differences in the theories, and their interrelatedness. Discuss how the theories can be simplified to allow for easy

recall of the contents, and use by the learners. Encourage them to link this knowledge of theories to their actual experiences with adolescents, and to do some reflection.

### **Facilitator's role during discussion**



- Apply ground rules guiding discussion.
- Put the domineering attitude of individual members in check.
- Allow for more questioning on the content of the subject.
- Give them enough time to think and encourage them to speak out.

### **Note to the Facilitator**

The facilitator should prepare well for the lecture and discussions on theories of adolescence. Relevant texts should be consulted. The facilitator must demonstrate an understanding of theory and its values in knowledge acquisition.

## **7.5.2 Content of the module**

### ***Theories of adolescence***

The explication of the concept of adolescence is a function of the interplay of different theories, as there is no one single theory that is adequate in offering explanations for the dynamics of adolescence. The theories are diverse in orientation – biological, psychological, psychosocial, and cognitive.

- Biological theory focuses on the period of physical and sexual development. This is known as puberty. During this time the body maximizes its capacity for physical strength and fitness, and reproductive potential. The age at which puberty begins significantly affects individual attributes for a variety of career prospects. For instance, early-maturing boys have an edge over late-maturing boys in athletics, and they have better self-concept, and are more comfortable and popular among their peers than the late maturers. The early-maturing boys are inclined to interact with older and more influential boys who may lead them into age-specific activities. Early maturing girls

can be subject to ridicule among their peers, and they may be a target for sexual gratification by older boys, and men.

- Psychosocial theory emphasizes identity formation by adolescents. According to Erikson, adolescence is regarded as a time of “storm and stress”. During identity formation, they attempt to achieve personal autonomy. This developmental model identifies four tasks undertaken by adolescents toward identity formation:
  - Activities toward separation from family and toward individualism.
  - Forming adult social relationships with the same and opposite genders.
  - Preparation for career and occupational self-identity.
  - Development and integration of ethical-moral injunctions which may be related or dissimilar to that of their family of origin.

In an attempt to achieve tasks 1 and 2, adolescents engage in risk taking or get involved in unhealthy behaviour such as having unprotected sex in order to be respected by their friends.

- Cognitive theory situates and expresses adolescent behaviour in intellectual terms. Jean Piaget describes adolescence as a period of formal operations in terms of cognitive ability, meaning that they are capable of reasoning in the abstract. They are capable of conceptualising alternative outcomes to a problem, and they can test possibilities. This situation causes them to develop an egocentric disposition which has a sense of invulnerability as a component. This mind-set leads to undertaking risky decisions.
- Sigmund Freud’s psychosexual theory indicates that adolescence is related to the genital stage which is the fifth and last phase of the psychosexual perspective. During early adolescence, the central issue is the object relations problem which has endured through the latency phase. Adolescents, at this stage, start manifesting signs of moving away from the incestuous love object, and toward

friends, especially same-sex friends or peers. This is accompanied by the rejection of family values due to the weakening of superego and ego, thereby leading to the loss of self-control. Adolescence proper is marked by heterosexual object relations.

## **7.6 MODULE THREE: REPRODUCTIVE HEALTH**

### **Purpose of the module:**

- ❖ Demonstrate an understanding of reproductive health
- ❖ Describe and situate adolescent reproductive health within the larger context of reproductive health

### **Study unit 3.1: Reproductive health**

Reproductive health is critical to adolescents, and it forms the bedrock of this study. Adolescent reproductive health needs have been acknowledged as essential in stemming the mortality arising from this essential aspect of human life. After this unit, learners will be able to:

- Describe the historical development of reproductive health, enumerate reproductive rights, highlight factors affecting reproductive health, and give an overview of both male and female reproductive tracts.

## Box five

### Facilitator's role



Introduce the topic to the learners. Tell them to give definitions of reproductive health the way they understand it. Ask what they know about reproductive health generally. Invite their contributions on the successes and shortcomings of reproductive health.

### Lecture



Start the lecture by defining the concept. Trace the historical development of reproductive health. Highlight the milestones inherent in the developmental process, and the obstacles. Teach learners how the concept was conceived. Highlight the contributions of the Planned Parenthood Federation, and the criticisms that attended the process of the development. Mention the historic International Conference on Population Development that took place in Cairo in 1994. The lecture should also cover benefits accrued from the conference such as reproductive health rights.

### Read (Self Study)



Encourage learners to read more about the International Conference on Population Development for directives on the activities of reproductive health.

### Activity/Search



Look for informational materials on reproductive health on the internet. Consult texts on reproductive health. Read materials highlighting the progress recorded in the area of reproductive health in Nigeria.

- Glasier, A; Gulmezolu, A.M, Schmid, G.P and Moreno, C.G (2006). Sexual and reproductive and reproductive health care: A matter of life and death. *The Lancet sexual and reproductive health series*, 1-13.
- Omobuwa, O; Asekun-Olarinmoye, E.O and Olajide, F.O (2012). Knowledge and perspectives of reproductive health services among in-school adolescents in Ile Ife, Osun State, Nigeria. *Journal of Medicine and Medical Sciences*, vol. 3, no. 7, pp. 481-488.

### Group discussion



Reproductive health is a topic that generates robust discussions as it comprises both health and social dimensions. Set the tone for discussion by asking the learners to debate reproductive rights and the socio-cultural implications of those rights. Discuss the components of reproductive health. Enjoin them to discuss the factors that influence reproductive health generally, and in their specific contexts. Encourage them also to discuss what they can do, as school health nurses, to modify those factors toward promoting reproductive health. Ask them to mention both male and female reproductive organs, and discuss each of these organs, and their role in reproductive health. Let learners reflect on those discussions on the reproductive issues and factors influencing them to investigate whether what they actually experience tallies with current practices globally.

#### **Facilitator's role during discussion**



- Moderate the discussions by encouraging them to contribute one by one.
- Encourage everyone to contribute what he or she knows.
- Provide knowledge where necessary.
- Repeat what some of them say to consolidate group awareness of contributions

#### **Note to the Facilitator**

The facilitator should prepare well for the lecture and discussions on reproductive health. The topic is somewhat complex, and often sparks off debate because of the attitudes of both males and females to reproductive issues. These kinds of discussions often index the power and authority relations between the two. The facilitator should have a grasp of the perceptions of different ethnic nationalities in Nigeria, about reproductive health. The facilitator should consult texts on reproductive health in health and social sciences. He or she should have knowledge of the critiques of different perspectives on reproductive health.

### **7.6.1 Content of the module**

#### ***Reproductive health***

Reproductive health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.” (ICPD, 1994). The import of this definition is that sexual health was given a prominence, and reproductive health is viewed beyond, the prism of reproduction and sexually transmitted diseases to include the individual's having the latitude to enjoy good sexual life for the purpose of self-fulfilment.

## **Historical development of reproductive health**

The present state of reproductive health is a function of social, political and economic processes. Reproductive health started gaining momentum when the United Nations for Population Development was mandated in the 1960s to raise the awareness levels of people about population. The rapid increase in population especially in Low and Middle Income Countries provided a springboard for enhanced reproductive health activities. This growing concern emerged about the same time as contraceptive technology – the IUD, contraceptive pills and long-acting hormonal preparations – were gaining a foothold in reproductive health discussion and debate. The World Health Organisation created a research programme aimed at developing fresh means of fertility regulation, and also toward improving the quality of the existing method in the 1970s. Greater attention was given to population issues in the developing countries, and this had the full support of UN agencies, and the International Planned Parenthood Federation whose activities focused on family planning. The ideological underpinning of this concern and increased awareness was that underdevelopment was a function of uncontrolled population, and that poverty was a direct cause of over-population. This snow-balled the activities which aimed at controlling women's fertility through a variety of birth control measures. This unilateral approach at controlling population drew the criticisms of women's movements, who viewed it as an attempt to stifle their reproductive rights, an extension of universal human rights. Besides, the scourge of HIV/AIDS caused stakeholders to look beyond mere control of fertility and rather beam the searchlight on the consequences of sexual activities. This led to the historic International Conference on Population Development that took place in 1994, which served as a watershed in the development and revitalisation of reproductive health. This was because the orientation made serious efforts to be inclusive and all-encompassing, by factoring in important views and positions in the course



of fashioning a new reproductive health agenda that would be acceptable, and also realistic and practical in its implementation.

### **Reproductive rights**

The International Conference on Population Development that took place in Cairo in 1990 enshrined some rights in reproductive health to which people, male or female are entitled. The rights indicate that individuals should enjoy free will and self-determination within the context of reproductive health. These rights empower women to control their sexuality; and they are given freedom to make choices which promote their reproductive and sexual health. The rights are as follows:

- Couples and individuals are allowed to freely and responsibly decide the number, spacing and timing of their children. Simply put, individuals irrespective of their status should not be hounded into taking decisions concerning the number of children or how they will be spaced.
- They should be given access to information and means of achieving the number of children and spacing. Put differently, the information needed to determine their fertility, the consequences of either their action or inaction, and the resources for attaining such status should be provided by those concerned.
- Every individual has a right to engage in and enjoy sexual activity that will bring about satisfaction in life, without any cultural or legal restraint. They should have unfettered access to information and methods that could make sexual activity safe for them.

### **Components of reproductive health**

For the first time in the annals of reproductive health, its components were clearly delineated by the International Conference on Population and Development in 1994. The components were distinct and constituted a platform for action toward achieving a reproductive health

focus. The renewed reproductive health programme recognises the need to enhance maternal health. By implication, more attention was directed toward reducing maternal death. The components of reproductive health are:

- A satisfying, safe sex life. Sexual activity is regarded as an emotional dimension of human health which should be practised so as to achieve satisfaction. Sexual activity, in the blueprint, goes beyond meeting reproductive expectations. Simply put, sex should not be reduced to a mere reproductive activity; rather, it is a means of expressing emotions and fulfilment.
- Ability to reproduce. This has always been one of the conventional aspects of reproductive health. Reproduction is a means of replenishing the human population. This is necessary to avoid extinction of the species.
- Successful maternal and infant survival. This finds its expression in maternal and child health. Maternal mortality should be reduced to the barest minimum; countries and nations are very concerned about the present maternal mortality levels. The health of children was also given attention by putting in place more child survival strategies.
- Freedom to control reproduction. The right to choose and live provided a lifeline for this freedom. Irrespective of gender, the Conference agreed that every individual should control his or her sexuality. The right to reproduce or not is vested in an individual, not in any other individual who may act as proxy. Individuals are at liberty to exercise this freedom without any form of religious, cultural, social or legal coercion.
- Information about and access to safe, effective, affordable methods of family planning. Information on where and how people can access and make use of contraceptive technologies is very crucial. Information should be extended to where services aimed at promoting maternal and child health can be obtained.

- Ability to minimize gynaecologic disease throughout life. Individuals should be provided with information and support that addresses avoiding the risk of developing conditions such as ovarian cancer, uterine fibroids, cancer of the cervix, and cancer of the prostate gland, or reproductive tract infections, especially those arising from untreated sexually transmitted infections.

### **Programme components of reproductive health**

The reproductive health components were streamlined into four programme components for action. The essence of this restructuring was to achieve maximum reproductive outcomes in the face of scarce resources being deployed. The programme components are:

- Safe motherhood. This programme aims at reducing both maternal and child mortality. It involves strategies such as the use of focused ante-natal care, partography, family-centred care or immunisation.
- Family planning. It is a programme intended at controlling reproduction through the use of proactive means. Abortions are discouraged as they increase the rate of maternal deaths. One of the effective means of achieving controlled reproduction is the use of family planning methods like the IUD, the contraceptive pill, hormonal preparations, barriers or sterilisation.
- Sexually transmitted infections, HIV and AIDS. Sexually transmitted infections and HIV and AIDS require prompt attention as they cause reproductive diseases. HIV/AIDS accounts for many deaths in any population. It is pandemic in nature hence the global attention at stemming the tide. All countries of the world have expressed their concern in this, which has caused them to show high levels of commitment in addressing the problem.
- Gender-based violence. This has to do with violent acts perpetrated against women and girls. Violence against men is not commonplace, as is that directed at women because

of the influence of patriarchy, and family structuring which concedes headship to males. Violence against women and girls can lead to sexual and reproductive health problems such as forced and unwanted pregnancies, unsafe abortions, traumatic fistula or STIs including HIV, and death.

### **Factors affecting reproductive health**

Significant progress can only be made in reproductive health outcomes if the militating factors can be held in check. The factors that have been identified are as follows:

- Inadequate levels of knowledge about human sexuality. Not many people understand what sexuality is all about. In addition to this, their awareness of their reproductive rights, treatment of reproductive problems, or the very essence of having a satisfying sex life is poor.
- Inappropriate and/ or poor quality of reproductive health information and services. The information available to people regarding their reproductive health is sparse, and is not comprehensive enough to cover all the aspects of reproductive health. The little information provided is mainly made available to people in urban or semi-urban areas. Inadequate funding has been the bane of procuring equipment needed for transmission of reproductive health education, coupled with the inadequate training of health personnel specifically in the area of reproductive health.
- The prevalence of high risk sexual behaviour is strengthened by indigenous values and belief systems. Some individuals do not believe in the existence of HIV/AIDS. In some societies, girl-child marriage is encouraged, which may result in vesicovaginal fistula, while in some societies, they believe that AIDS can be treated by having sexual intercourse with girl-children. The use of barrier methods as a means of protecting against sexually transmitted infections is not well received in some communities.

- Discriminatory social practices. Women and girls are always at the receiving end of discriminatory social practices. Men are accorded some rights and privileges in some societies, which they deny women and girls. Boys and men are flagrantly encouraged to engage in sexual expression while women and girls are forbidden from doing the same. In effect, women are denied the exploration of their sexuality and reproductive potential to the fullest.
- Negative attitudes toward women and girls. In some climes, girls and women are regarded as inferior beings, hence the practice of preference for male children. In these regions they treat women with disdain. They are prevented from participating in the decision-making processes surrounding their own sexuality and reproductive health. The androcentric nature of society, especially African societies, encourages the inferior status of women in the decision-making processes. They are not allowed to control their own fertility. Girl-children are subjected to genital mutilation owing to the belief that the presence of a clitoris will encourage promiscuity in females.

### **Overview of the female reproductive system**

The female reproductive system comprises ovaries, fallopian tubes, uterus, vagina, vulva and breasts. These organs are responsible for sexual activity and reproduction.

#### **Ovaries**

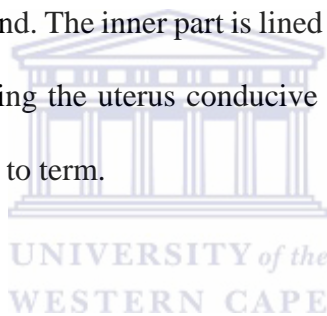
There are two ovaries in the female reproductive system. They are almond-sized, and located on the left and right sides of the pelvic body cavity extending to the superior portion of the uterus. They are responsible for the production of oestrogen and progesterone as well as an ovum, which is released on a monthly basis; this is known as the ovulation period. The ovum released enters into the fallopian tube for possible fertilization after copulation.

## **Fallopian tubes**

These are muscle-like tubes extending from either side of the ovary to the left and right superior corners of the uterus. Each of these is divided into portions: interstitial, isthmus, ampulla and infundibulum which is covered with finger-like projections called fimbriae that stretch over the ovaries. These finger-like projections collect the ovum from the ovary and transport it to the ampullary region of the fallopian tube.

## **Uterus**

The uterus is a hollow muscular, pear shaped organ situated posteriorly and superiorly to the urinary bladder. It is attached to the two fallopian tubes on its each superior end, and vagina through the cervix on its inferior end. The inner part is lined with the endometrium which helps in reproductive activities by making the uterus conducive for implantation of the foetus and subsequent carrying of pregnancy to term.



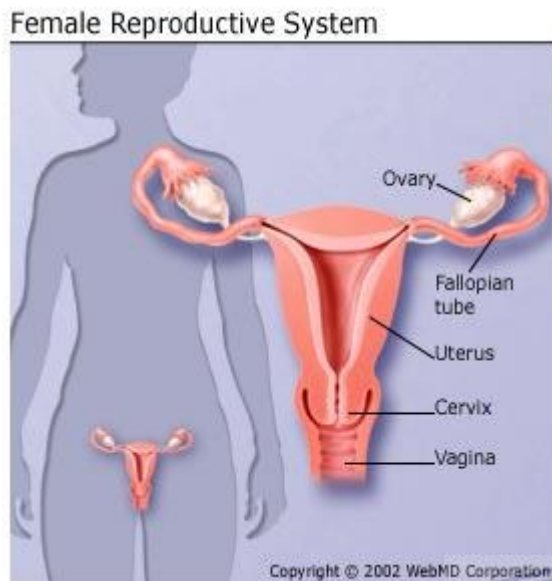
## **Vagina**

This is an elastic, muscular tube that connects the cervix of the uterus to the exterior of the body. It functions as a receptacle for the sperm during sexual intercourse. It expands during labour to allow for the delivery of the foetus, and serves as the passage of the menstrual flow.

## **Vulva**

This is a name jointly given to the external genitalia situated in the pubic region of the body. Both urethra and vagina open into the vulva externally. The mons pubis is the upper part, and covered with hair. The mons pubis provides support for the vulva. The lower part of the mons is divided into left and right halves called labia majora. The inner part of the labia majora on each side houses the labia minora, and these surround both urethral opening and vagina. There

is a presence of nerve tissue on the upper part of the labia minora known as the clitoris which is very sensitive to sexual pleasure.



**Fig 7.1: Female reproductive system**

## **Breast**

A female individual is naturally endowed with a pair of breasts located in the thoracic region. These are specialised glands adapted for nurturing babies, and are sensitive to erotic touch. They contain mammary glands which help in milk production. Each breast has close to fifteen clusters of mammary glands. The nipple is the pointed end of the breast through which milk exits.

## **Overview of the male reproductive system**

The male reproductive system consists of penis, scrotum, epididymis, vas deferens, seminal vesicles and prostate gland. They function together in order to bring about reproductive processes.

## Penis

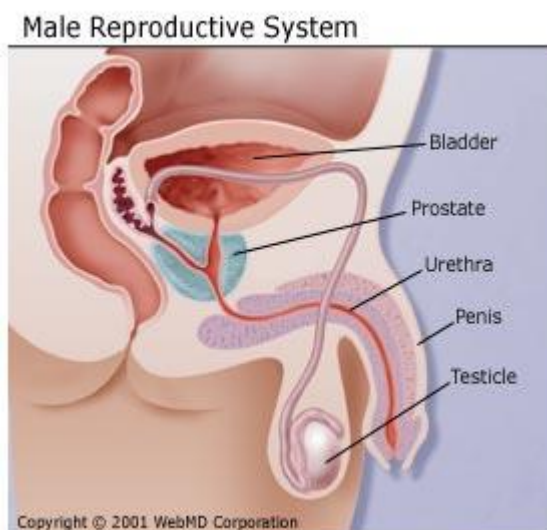
This is divided into three portions: the root, the shaft and the glans penis. The root is the portion that is attached to the lower abdominal structures and pelvic bone. The penis has three sinuses (cylindrical spaces) that contain blood. The two larger ones are called corpora cavernosa while the smaller one is known as corpora spongiosum. This surrounds most of the urethra. When these sinuses are engorged with blood, the penis becomes large and rigid.

## Scrotum

This is a thick skinned pouch that houses and protects the two testes. It functions as a climate control system by regulating the temperature of the environment of the testes; temperatures that are too high in relation to proximate to body temperature can hamper the effective functioning of the testes.

## Testes

Testes always appear in pairs. They are oval-shaped, and on average 1.3 to 3 inches in length, and 2 to 3 teaspoons (20-25ml) in volume. The left testis dangles lower than that of the right one. Testes produce sperm, and a hormone called testosterone.



**Figure 7.2: Male reproductive system**



## **Epididymis**

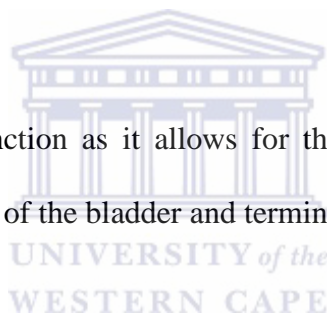
It is a group of looped microscopic tubes, about 20 feet (6 meters long). It serves as a receptacle for sperm and provides an environment conducive to the storing of sperm under conditions which nurture and promote their motility through the female reproductive.

## **Vas deferens**

It is a structure that serves as a conduit for the sperm from the epididymis to the back of the prostate gland, and links to one of the two seminal vesicles. The vas deferens is accompanied by muscle fibres, blood vessels, and nerves and these become intertwined to form the spermatic cord.

## **Urethra**

The urethra performs a dual function as it allows for the passage of urine and sperm. It commences from the inferior part of the bladder and terminates at the exterior.



## **Prostate gland**

The prostate gland is a walnut-sized structure situated under the bladder, and surrounds the urethra. It grows in size as the individual advances in age and the cells can become cancerous.

## **Seminal vesicles**

These are situated above the prostate gland and join with the vas deferens to form an ejaculatory duct which moves through the prostate. The fluid from both the prostate and seminal vesicles provides a fluid medium for the sperm. The fluid also nourishes the sperm, and provides most of the volume of the semen while the fluid from Cowper's gland from the urethra and vas deferens account for a lower proportion of the volume of the semen. The semen is the fluid that is ejaculated with the sperm.

## Study unit 3.2: Adolescent reproductive health

Adolescent reproductive health is an integral aspect of reproductive health. Inadequate attention and commitment to their reproductive health has been a major contributing factor in increased mortality in this group of individuals. After this unit, learners will be able to:

- Identify and describe components of adolescent reproductive health.
- Identify and describe factors influencing adolescent reproductive health.

### Box six

#### Facilitator's role



Building on the previous lesson on reproductive health, test learners' knowledge of adolescent reproductive health and its components. Ask them to list problems that an adolescent could have as a result of inadequate attention to this aspect of reproductive health. Prepare the setting for the lesson. Position audio-visual materials in the mode that will facilitate learning.

#### Lecture



Teach learners about those components of adolescent reproductive health which demand school health nurses' attention. Relate the components to both male and female reproductive tracts. Give a run-through of the factors influencing adolescent reproductive health.

#### Read (Self Study)



Encourage learners to read more about the International Conference on Population Development in respect of adolescent reproductive health.

#### Activity/Search



Look for informational materials on adolescent reproductive health on the internet. Consult texts on adolescent reproductive health. Check for more information from manuals from reproductive health units of your health department. Consult available materials in adolescent reproductive units

of the State Ministry of Health. Look for more materials on adolescent reproductive health in education departments, and secondary schools.

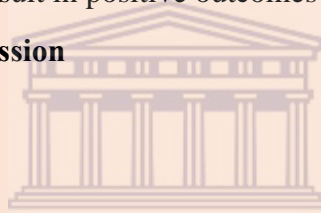
- UNFPA (2004). Programme of action; adopted at the International Conference on Population Development, Cairo, 5-13 September, 1994
- <http://www.actionhealthinc.org>. Adolescent sexual and reproductive health in Nigeria
- <http://www.jahonline.org>. Sexual and reproductive health care: A position paper of the Society for Adolescent Health and Medicine.
- <http://www.un.org/popin/icpd/conference>. ICPD programme of action.

### Group discussion



Debate each of the components of adolescent reproductive health, and how participants have been addressing the challenges associated with them. How they are assisting the adolescents in their respective schools should be discussed. Encourage learners to discuss the responses of adolescents to their services, and the role of principals and school teachers in aiding their service to the adolescents. Tell participants to discuss factors influencing adolescent reproductive health, and how these can be modified to result in positive outcomes for adolescents.

### Facilitator's role during discussion



UNIVERSITY of the  
WESTERN CAPE

- Motivate them to discuss freely among themselves.
- Maintain a check on the more exuberant members of the group.
- Ask questions of them, and wait for feedback before asking further questions.
- Tailor group dynamics toward positive ends.
- Help learners to integrate knowledge of reproductive health with that of adolescent reproductive health.

### Note to the Facilitator

Adolescents constitute a vulnerable group owing to their risky activities. Among these is their sexual activity, which predisposes them to morbidity arising from sexually transmitted infections (STIs), and HIV/AIDS, which in most cases results in death. The facilitator should equip him or herself with the knowledge of components of adolescent reproductive health, and the factors that influence it. The facilitator should have a good grasp of the factors influencing adolescent reproductive health and the need to consult a wide range of materials on this subject.

## **7.6.2 Content of the module**

### ***Adolescent reproductive health***

Adolescent reproductive health was given prominence for the first time during the International Conference on Population Development held in Cairo in 1994. The conference addressed reproductive health issues and expected responses from various governments, institutions, groups, and other stakeholders.

The justification for giving this kind of unprecedented attention was anchored on the fact that adolescents constitute about 20% of the world population with about 85% of them living in developing countries (Morhason-Bello et al. 2008: 90). The mortality rate among them is high owing to their risky behaviour.

### **Components of adolescent reproductive health**

The International Conference on Population Development (1994) identifies the following areas as the components of adolescent reproductive health: unwanted pregnancy, sexually transmitted infections, and unsafe abortion.

### **Unwanted pregnancy**

Adolescents are prone to pregnancies that they are not prepared for. Adolescence is the stage in which they become sexually active and this prompts some of them to engage in sex. Their naivety about sex and poor management of their relationships at this stage results in pregnancies which, in most cases, are unwanted. The majority of the world's adolescents are found in developing countries where poverty is rife, and educational and employment opportunities are limited. This means that unwanted pregnancies aggravate their poor living standard. These pregnancies militate against educational advancement and thus sustain the cycle of poverty.

## **Unsafe abortion**

Arising from unwanted pregnancies, a significant number of the adolescents involved see abortion as a solution. The decision to take this option may stem from the reaction of the parents and other adults in their lives to the perceived social stigma. This may prompt adolescent girls to seek abortion, especially from “quacks” who in the process could damage their wombs or cause profuse bleeding due to incomplete procedures or perforation. Many adolescent girls have died as a result of unsafe abortions.

## **Sexually Transmitted Infections including HIV/AIDS**

Adolescence is a period marked by puberty and a desire to engage in risky behaviours. Sexual experimentation is identified as one of these behaviours. Besides pregnancy on the part of adolescent girls, a lack of good information and guidance on how to manage this behaviour by protecting themselves could lead to infection with sexually transmitted diseases, which includes HIV for both male and female adolescents. Unsafe sex has been found to be the second-most important risk for disability and death in the world’s poorest communities.

## **Programme activities of adolescent reproductive health**

In view of the magnitude of adolescent reproductive health as a world problem, countries, communities and various stakeholders are enjoined to mount concerted campaigns in addressing the challenges around its components. This requires commitment in terms of financial involvement, technical know-how, and manpower development in respect of adolescent reproductive health. The programme activities entail the following:

- The programme is expected to encourage adolescents to access suitable services and information. Services rendered to adolescents include provision of information on sexually transmitted infections, protection against them, provision of information on where those services are available, and making the services adolescent-friendly.

Provision of contraceptives should be made without judgement. Service providers should respect adolescent confidentiality and privacy.

- Adolescent pregnancies should be reduced in order to avoid both health and social complications. Adolescents have to be properly guided in making informed choices which maximize their gains and interests. Where pregnancy occurs, adolescents should be provided with adequate social support, and they should be accepted.
- Programmes for adolescent reproductive health should take into consideration the guidance in the areas of gender relations, and how they relate to each other. Adolescents who are victims of gender violence should be provided with support, and not stigmatised. Their decisions in reproductive health should be guided so as to avoid making irresponsible decisions that can damage their health and future.
- Programmes should aim at involving and training those who provide guidance to adolescents in respect of responsible reproductive behaviour such as family and parents, communities, schools or religious institutions. The essence of the training is to enhance their capacities in those areas that concern adolescent reproductive health.

## **7.7 MODULE FOUR: ADOLESCENT DECISION-MAKING**

### **Purpose of the module**

- ❖ To describe the decision-making processes
- ❖ To describe and delineate adolescent decision-making processes

### **Study unit 4.1: Overview of decision-making process**

Decision-making is a necessary activity in a human's life. Individuals make decisions on a daily basis which help them to function optimally in the world. Understanding the decision-making process is basic to that of the adolescent process. It enables one to know where the deviation lies in terms of how adolescents make their decisions.

- Identify and describe decision-making models and processes

### Box seven

#### Facilitator's role



Introduce the lesson to them and inquire about their background knowledge on the topic. Let them understand that decision-making as a topical issue is a highly abstract topic and that knowledge in this area requires adequate attention. The facilitator should position audio visual aids in the mode that will enable learners to learn the information easily. The facilitator should be clear in his or her explanations as this will aid learners in comprehending the topic. The facilitator should pause between lessons to allow learners to reflect on their own decision-making experiences.

#### Lecture



The lecture on decision-making covers areas such as definition, decision-making models which are normative and descriptive, the steps inherent in each of the models, and the differences between the models. While normative models follow logical steps toward arriving at decisions, descriptive models reflect an understanding of how decisions are actually made. In this instance the decision-maker is rational but lacking knowledge about all possible alternatives, which can be obtained in the normative model. The lecture further covers the central issue integrating the two models.

#### Read (Self Study)



Ask them to read more about decision-making. They should learn more about different models and the direction of the models in respect of decision-making.

#### Activity/Search



Consult texts on decision-making especially psychology texts, and further conduct an internet search for informational materials on decision-making processes.

- Gordon, C.P (1996). Adolescent decision-making: A broadly based theory and its application to the prevention of early pregnancy. *Adolescence*, vol. 31, no. 123, pg. 561.
- Reyna, V and Farley, F (2006). Risk and rationality in adolescent decision-making: Implications for theory, practice and public policy. *Psychological Science in the Public Interest*, vol. 7, no. 1, pp.1-44.
- Steinberg, L (2007). Risk taking in adolescence: New perspectives from brain and behavioural science. *Current Directions in Psychological Science*, vol. 16, no. 2, pp. 55-59.

- Blakemore, S-J and Robbins, T.W (2012). Decision-making in the adolescent brain. *Neuroscience*, vol. 15, no. 9, pp. 1184-1191.
- Dustin, A; Chein, J and Steinberg, L (2013). The teenage brain: Peer influences on adolescent decision-making. *Association for Psychological Science*, vol. XX, no. X, pp. 1-7
- <http://www.sciencedirect.com>. A dual-process approach to health risk decision-making: The prototype willingness model

### Group discussion



In view of the nature of the topic, start a discussion on the topic. Allow members to make clarifications. Invite their opinions on decision-making, and their experiences regarding decisions they have made in the past. Ask them to compare their experiences regarding the outcomes of such decisions. Encourage them to do further reflection, and allow them to link their reflections to the concepts and generalizations regarding decision-making.

### Facilitator's role during discussion



- Provide enough support in terms of knowledge needed.
- Encourage them to share their experiences.
- Distil differences in experiences for integration.
- Encourage contributions from every member of the group.

### Note to the Facilitator

The facilitator should adequately prepare himself or herself as the topic is highly conceptual. Consulting a broad range of texts is essential. The facilitator should understand decision-making models well as this serves as a road map for understanding the process of decision-making.

## 7.7.1 Content of the module

### ***Decision-making***

Decision-making is defined as a means of finding and selecting from a range of options which are influenced by an individual's values and preferences (Fulop, 2005: 1).

Secondary school adolescents constantly make decisions regarding their reproductive health. This situation emanates from the pressure arising from their pubescence and its attendant challenges. Decision-making during adolescence poses one of the greatest challenges to the individual and failure to make good decisions can compromise their reproductive health status.



Their naivety in decision-making requires that they are well guided by school health nurses who remain the main health professionals charged with the responsibility of adolescent health oversight in the school environment. This fact constitutes the focus of this research endeavour. As school health nurses are expected to provide guidance on decision-making on adolescents' reproductive health, it is imperative that the school health nurses who perform this role be well equipped and grounded in the knowledge and understanding of adolescent decision-making and its processes.

### **Decision-making models**

There are two types of decision-making models:

- Normative model
- Descriptive model

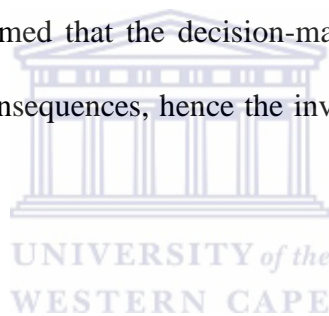


#### **Normative model**

The normative model of decision-making identifies the steps that individuals should take so as to arrive at a conclusion that will yield positive outcomes. The steps involved are outlined as follows:

- Identifying the possible options
- Identifying the consequences of each option
- The individuals engaging in decision-making must evaluate the desirability of each consequence each option.
- Assessing the likelihood of each consequence if each action is taken
- Combining everything according to a logically defensible “rule”

Normative decision-making models encompass some logical steps that have to be taken before an individual taking a decision can make choices. Simply put, the individuals make informed choices if they observe all the steps involved. Having identified a decision goal, an individual searches for the possible options that may address the problem. The individuals proceed to determine the possible consequences of each of the options with the desirability of each consequence being evaluated. Put differently, individuals compare the consequences of each option and check the one that can be adopted with least harmful effects. The decision-maker will assess the likelihood of each consequence should action be taken, which in effect, reflects the probabilities of the occurrences of those options, and the decision is finally taken based on the values or utilities each consequence will yield against the backdrop of their probabilities. In a normative model, it is assumed that the decision-maker has the knowledge of all the possible alternatives and their consequences, hence the involvement of high level rationality and higher-order thinking.



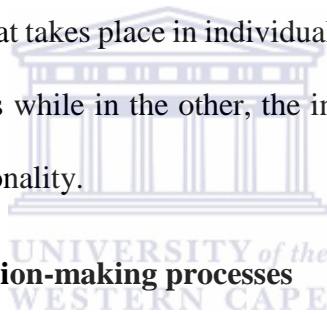
### **Descriptive model**

The descriptive model set the goal of understanding how decisions are actually made. The descriptive model assumes that a decision-maker has limited rationality in the course of making decisions. Put differently, the decision-maker is rational but without the knowledge of all the possible options or alternatives needed for making a decision, as he or she would with a normative model. A rational decision-maker is an individual who has information on preferences or alternatives and who is able to choose a precise alternative that will enable him or her to attain the highest and best on the preference list. In the descriptive model, the decision-maker is searching for tenable answers to a problem based on available information. The model rationalises why people do not always make the best choices.

The following steps are identified in the descriptive model of decision-making:

- Establishing acceptable goal
- Defining the subjective perceptions of the problem
- Identifying acceptable alternatives
- Evaluating each alternative
- Selecting alternative
- Implementing decision
- Following up

The central issue bringing the two models together is an idea of decision-making as an information processing activity that takes place in individuals. One entails having the complete knowledge of all possible options while in the other, the individual is restricted in his or her behaviour because of limited rationality.



#### **Study unit 4.2: Adolescent decision-making processes**

Decision-making by adolescents has been found to be critical to their reproductive health outcomes. Adolescents engage in risky behaviours which are informed by poor decision-making abilities. School health nurses have a role to play in guiding them in their decision-making on reproductive health issues. School health nurses have to be effectively prepared by having a good knowledge and understanding of adolescent decision-making processes as this will enable them to provide effective guidance. After this study, learners will be able to:

- Identify and describe adolescent decision-making models, and their process of making decisions.

## Box eight

### Facilitator's role



Get the venue ready for the class. Make them a bit more attentive to the lesson on adolescent decision-making as this constitutes the focus of school health nurses' guidance activities. Ask, based on the knowledge gained from previous lesson, if they can identify models of adolescent decision-making. In the mode of the previous lesson, use audio-visual materials in a way that encourages an easy grasp of lessons.

### Lecture



Adopt the lecture approach as the issues selected for learning still remain abstract. The lecture should cover adolescent decision-making theories such as: sensation-seeking model, problem behaviour model, prototype willingness model, and also expected utility theory. The lecture should also cover adolescents' decision-making process which entails the analytical and heuristic modes of decision-making. Slow development of the brain region which is necessary for cognitive control activities account for risk-taking decisions and impulsivity associated with adolescents. This domain underlies the differences between adult and adolescent decision-making processes. The lecture will further focus on decision-making skills school health nurses need to teach adolescents in their decision-making.

### Read (Self Study)



Encourage learners to seek information on the adolescent decision-making process, and to recognise what differentiates adolescent decision-making from adult decision-making.

### Activity/Search



Search for more information on the internet, and in psychological and nursing texts. Look for more information in contemporary journals on decision-making. Consult the following journals and websites:

- Gordon, C.P (1996). Adolescent decision-making: A broadly based theory and its application to the prevention of early pregnancy. *Adolescence*, vol.31, no. 123, pg. 561.
- Reyna, V and Farley, F (2006) Risk and rationality in adolescent decision-making: Implications for theory, practice and public policy. *Psychological Science in Public Interest*, vol. 7, no.1, pp.1-44.
- Steinberg, L (2007). Risk taking in adolescence: New perspectives from brain and behavioural science. *Current Directions in Psychological Science*, vol. 16, no. 2 pp. 55-59.

- Blakemore, S-J and Robbins, T.W (2012). Decision-making in the adolescent brain. *Neuroscience*, vol. 15, no.9. pp. 1184-1191.
- Dustin, A; Chein, J and Steinberg, L (2013). The teenage brain: Peer influences on adolescent decision-making. *Association for Psychological Science*, vol. X, no. X. pp. 1-7.
- <http://www.sciencedirect.com>. A dual-process approach to health risk decision-making: The prototype willingness model

### Group discussion



Introduce the topic again as a discussion issue. Let everyone make their contributions regarding their experiences on how adolescents make their decisions especially on reproductive health, in their respective school environments. Provide necessary clues to questions and clarifications on how adolescents make their decisions. Encourage them to discuss decision-making skills they need to teach adolescents to aid their decision-making in reproductive health. Assist in analysing each of the skills. School health nurses have to understand complex management skills in decision-making as this will assist adolescents to weave different facets of their decisions together. School health nurses should know how to teach adolescents about possibilities and the likely consequences of the option selected. Another skill that school health nurses should teach adolescents is solving problems arising from decisions taken, which requires teaching them about different alternatives by attaching them to different strands of the consequence of an action. School health nurses should understand and be able to teach relativistic thinking skills. These have to do with influence of context such as beliefs, values or family on decision-making. Another skill has to do with the ability to think logically about thought. This makes use of relief or regret which helps the decision-maker to anticipate regret based on the fact that a risky decision was taken. School health nurses need to discuss these skills for proper application. They should further discuss factors influencing adolescent decision-making in different contexts. Factors such as cognitive ones which include cost-versus-benefit, knowledge and retrieval of knowledge and age; and socio psychological factors such as gender, family, peers, egocentrism, identity, risk taking, and locus of control should be examined as applied to different situations.

### Facilitator's role during discussion



- Encourage everyone to contribute meaningfully to discussions.
- Motivate them to seek clarification where necessary.
- Ask them questions to determine the level of understanding of the issues that came under discussion.
- Guide them effectively in the right direction.
- Allow time for reflection, and encourage questioning.

### Role play



Ask learners to demonstrate what they have learnt and discussed in the form of a role play. Let some play the role of school health nurses and others the role of adolescents in school health situations, in which the school nurse is teaching adolescents decision-making skills. Tell the audience to jot down

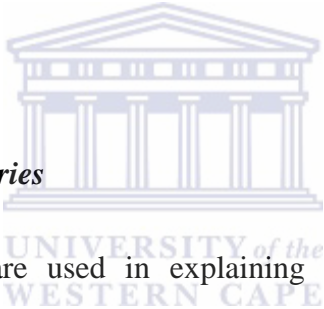
their remarks while role play is taking place. Discuss the comments later to further their knowledge on the issue.

### **Note to the Facilitator**

The facilitator needs adequate preparation on this subject as it remains abstract, and this will necessitate questioning from learners. Consult different texts on the adolescent decision-making process, models and factors influencing decision-making by adolescents.

## **7.7.2 Content of the module**

### ***Adolescent decision-making theories***



There are some theories that are used in explaining decision-making by adolescents. Adolescents engage in risky decision-making in some critical areas such as their reproductive health. They engage in both analytic and intuitive thinking. They, however, seldom engage in rational decision-making. Most of their decisions are intuitive and therefore entail many risks. Their risky decision-making can be explained by using some or a combination of the following theories/models: the sensation seeking model, problem-behaviour theory, and the prototype model.

### **Sensation seeking model**

The sensation seeking model entails the risk taking decisions of adolescents in the light of their need for unusual, diverse and multifaceted sensations and experiences, and their preparedness to take physical and social risks for of the sake of having such experiences. Adolescents take

some reproductive decisions such as having unprotected sex without giving adequate consideration to their implications. They engage in this form of decision-making in order to experience and feel the sensations.

### **Problem behaviour theory**

The fundamental premise of this theory is that all behaviour is the result of interaction between the individual and his or her environment. There are three dimensions of this theory: personality system which comprises social cognitions, individual values, and expectations beliefs and attitudes; the perceived environmental system, and this entails social influences that are closer to and farther from individuals such as family and peer bearings and anticipations. The third component revolves round problem and conventional behavioural structures that function in antagonistic relation to each other. Problem behaviour has to do with conduct has been defined as socially undesirable while conventional behaviour finds its expression in the actions that meet the expectations of the society. Adolescents make a decision that encourages risky behaviour because they want to assert themselves and achieve independence. This causes them to behave in ways exactly opposite to what society expects of them. They believe that such behaviour will influence authority structures.

### **Prototype willingness model**

Decisions that lead to risky behaviour by adolescents emanate from the image (prototype) of persons their age who engage in the desired or “model” risky behaviour. The adolescent’s perception of the prototype (positive or negative) will determine the inclination of an adolescent to engage in the behaviour or refrain from doing so. Adolescents tend to engage in risky sexual behaviour if they develop a positive perception of the image of the person their age who engages in the behaviour. They tend to adopt risky behaviour as a means of declaring their support for, or being part of a certain group whose members exhibit such conduct.

## **Expected utility theory**

Adolescents make decisions that may not allow for the consideration of all possibilities before arriving at a conclusion. The import of considering all possibilities is to maximize the expected decision value rule. Expected utility theory emphasises the preference of utility over value. Expected utility posits that every decision's outcome is accompanied by some degree of utility. Put differently, that every aspect of an outcome of any decision will satisfy some needs or wants, or have some pleasure or net benefit. Adolescents place less emphasis on the value of the issue upon which a decision is being taken. The expected utility of an uncertain choice or alternative is the weighted sum of the utilities of its outcomes, each multiplied by its probability.

## ***Adolescents' decision-making process***

Adolescent decision-making follows both analytical and heuristic directions. The analytical mode is where information processing leads to decision-making based more on deliberative reasoning, while the heuristic mode is influenced by affect, emotion or experience. The slow development of the brain regions necessary for cognitive control is responsible for risk-taking decisions and impulsivity associated with adolescents. In addition to this slow development, adolescents demonstrate preferences for decisions that can bring immediate reward. This is further associated with oversensitivity of the reward processing region of the brain. All these put together constitute the heuristic mode of reasoning. Reduction in this form of decision-making takes place with an increase in cognitive levels. The development of cognitive control enables adolescents to de-emphasize decisions based on immediate reward and risk taking.



## ***Factors influencing adolescent decision-making***

Adolescent decision-making is affected by both cognitive, and social and psychological factors. The cognitive factors include cost-versus-benefit, knowledge and retrieval of knowledge and age, while social and psychological factors are egocentrism, identity, intimacy, risk taking, locus of control, gender, and family or peers. School health nurses need to know how adolescents think, what information they possess and what information they chose to use before they can guide adolescents in their decision-making in reproductive health.

### **Cognitive factors**

The cognitive ability of adolescents influences their decision-making. This entails their ability to engage in cerebral activities which include rationality and reasoning, which help in making effective decisions in their reproductive health.

#### **Cost-versus-benefit factor**

This entails the ability of an individual to think critically about what one stands to gain against the backdrop of its costs. It requires elaborate mental processing before one can take a stand that will less likely costs one too much. Adolescents place benefits over costs, which is why they take some decisions that have attendant reproductive health risks. Some adolescents may opt for unprotected sex in order to maximize the gains of sexual intimacy.

Knowledge and retrieval of knowledge is a cognitive ability that entails seeking and storing information, and how this information can be recalled in order to be used for decision-making that will engender positive reproductive outcomes. School health nurses need to provide adequate information on reproductive health, the expectations of adolescents, and how they can use this knowledge to enhance their reproductive health status through good decision-making.

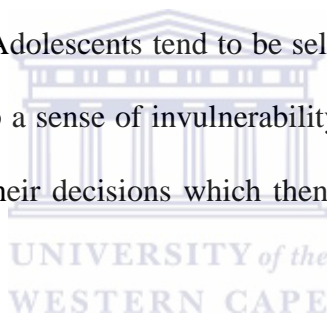
## Age

Age may influence the decision-making abilities of younger and older adolescents. Younger adolescents may not be capable of formal thought. Put differently, they may not be able to think syllogistically while older adolescents are capable of thinking about the attendant consequences of their decisions in reproductive health. In sum, older adolescents are more capable of rational activities than younger ones.

## **Social and psychological factors**

### Egocentrism

This concept is concomitant with adolescence. It centres on the adolescent's feelings, which lack some degree of sensitivity. Adolescents tend to be self-centred. They focus attention on themselves mainly. They develop a sense of invulnerability thinking that no harm can befall them. These feelings influence their decisions which then incline toward engaging in risky sexual behaviours.



### Identity

Adolescence is also a stage when individuals display their identity. Identity formation is an effort geared toward personality development. They identify with sub-groups whose members' activities appeal to them. They identify with people whom they regard as role models. The activities of the people who occupy this kind of status in their reveries may influence the direction of their decision-making especially in reproductive health.

### Risk taking

Risk taking is a corollary to egocentrism. The feeling of invulnerability predisposes adolescents toward engaging in risky sexual behaviour. The egocentric disposition constitutes the psychological basis of invulnerability which engenders risky decisions.

## Locus of control

This could be either internal or external. Adolescents who think that their behaviour has an effect on others demonstrate the internal locus of control. They are usually self-directed, and less prone to external pressure. Adolescents whose decision-making is greatly impacted upon by family members or peers are functioning within the context of external locus of control. The direction of decision-making by these adolescents depends on which group wields a greater influence.

## Gender

Gender has to do with the definition and division of roles between the two sexes as agreed on by the society. Put differently, it is socially constructed. The two genders have different orientations. Males have a hierarchical orientation while females are imbued with a relationship orientation. The stereotypes created and perpetuated by the society influence the decision-making processes of the two genders. Male feelings of domination sometimes influence liberal decision-making in reproductive health, such as having multiple sex partners, often regarded as a means of boosting the male ego. The relationship orientation of female adolescents does not predispose them to refuse men's sexual pressure. Their decision-making processes are patterned toward this value.

## Family

Family values greatly influence the decision-making of adolescents. The differences in parental styles exert a considerable influence on the decision-making of adolescents. Some adolescents find it difficult to act against family values especially in an authoritative situation, in spite of their feelings of independence.

## Peers

Adolescents turn to peers for support and acceptance when they turn against their family. They subject themselves to peer influences as an alternative to the family in terms of love, acceptance or support. The decision-making at this stage is impacted by the views and actions of their friends, especially those who have the same goals or views as theirs. The influence of the peer group has some bearing on adolescent decision-making in reproductive health.

## 7.8 MODULE FIVE: GUIDANCE

### **Purpose of the module:**

- ❖ To describe historical development, types, principles and perspectives of guidance
- ❖ To describe guiding adolescents' decision-making in reproductive health

### **Study unit 5.1: Introduction to guidance**

This study focuses on how school health nurses can be assisted toward guiding adolescents in their decision-making on reproductive health. This study unit will highlight the historical development, types, principles and conceptual perspectives on guidance. After this unit, learners will:

- Demonstrate an understanding of the historical development of guidance by recounting the history of guidance, and identifying and describing types of guidance.
- Demonstrate the knowledge of principles and perspectives of guidance by being able to enumerate the principles, and describe the links between conceptual perspectives and guidance.

## Box nine

### Facilitator's role



Ensure the preparedness of learners to participate in the training activities. Prepare them psychologically. Excite their mood by giving them cheerful news or telling them an interesting, but relevant story. Ask for their contributions on the topic. Let them be aware of different methods that will be involved in the session. Get the teaching materials ready for the day's activities. Let them realise that guidance is an interesting topic but requires some mental activities to understand these issues.

### Lecture



The lecture addresses the development of guidance as a concept. It spans the definition, types, principles and perspectives in which guidance can be situated. Move at the pace of the learners and ensure they gain an understanding of what is being conveyed to them. Get them to learn about three different types of guidance: educational, vocational, and personal and social guidance. The principles of guidance may include interrelatedness of human beings, similarity of individuals in many respects, formulation of desirable and realisable goals of behaviour being the essence of guidance. Guidance is regarded as a service in a context. Physical, social and mental health problems interfere with an individual's adjustment to school. The person-centred perspective is used to situate guidance as an activity. The three perspective elements are self-actualization, self-concept, and unconditional positive regard.

### Read (Self Study)



Read about guidance: definition, types and principles. Differentiate the types from one another. You should read about how guidance is situated in a theoretical context. Link the principles to the perspective.

### Activity/Search



Conduct an internet search on materials and texts on guidance. Educational and nursing texts are useful in this regard. Check the following sources:

- Kagan, C and Evans, J (1995) *Professional interpersonal skills for nurses*. San Diego: Singular Publishing Group Inc.
- Burnard, P (1996) *Acquiring interpersonal skills: A handbook of experiential learning for health professionals*. San Diego: Singular Publishing Group Inc.

- Haddon, P.F.C (1999) *Mastering personal and interpersonal skills*. London: Thorogood Ltd.
- Miller, L (2006) *Counselling skills for social work*. London. Sage Publications

### **Group discussion**

Discuss guidance and types. Spark a debate on principles and person-centred perspectives. This encourages a reflection on their experiences as school health nurses, regarding guidance. Discussion should relate the principles to the perspective.

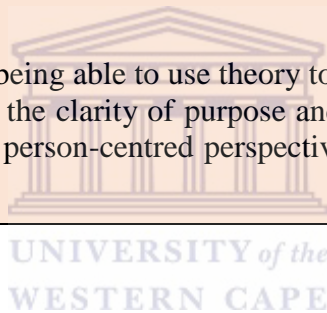
### **Facilitator's role during discussion**



- Guide the discussion to produce fruitful results.
- Provide knowledge and clarification where necessary.
- Guide them in linking the elements of the theoretical perspective to the principles of guidance.
- Encourage everyone to make contributions.
- Guide against the domination of discussion by one or two individuals.

### **Note to the Facilitator**

The facilitator should note that being able to use theory to explain the concept of guidance is very important as it will bring about the clarity of purpose and hence the need to demonstrate a good understanding of elements of a person-centred perspective. This requires that the facilitator read widely on the perspective.



## **7.8.1 Content of the module**

### **Guidance**

Guidance is a process that entails the application of knowledge and understanding of issues or disciplines toward assisting individuals in appreciating their innate abilities and potential, in making informed choices and preferences concerning their aspirations, goals or focus, with the ultimate aim of adjusting to the demands of their environment in the spirit of self-fulfilment.

### **Brief historical development of guidance**

Guidance, as a means of assisting individuals toward making decisions on critical aspects of their life, predates the 21st century. In ancient times, the notion of a teacher as a guide was linked to Plato. This was a period when people drew an analogy between a teacher and a guide. The teachers in British schools were encouraged to incorporate guidance in their role structure.

However, the size of classes and the subject-based fragmentation of the school curriculum constituted an obstacle to this idea. Relative achievement was recorded as some schools developed pastoral care as a means of entrenching guidance by allotting a pupil to a teacher who had overall responsibility for the pupil. The root of this arrangement is traceable to the house system in self-governing boarding schools. The development of pastoral care in the state sector was substantially improved in the 1960s and 1970s. The obstacles arising from class size and other demands of comprehensive schools were contained. School was considered as guidance community in England. In Scotland, the concept of guidance was preferred above pastoral care, subsequent upon which a formal structure of promoted guidance posts was established in all state schools. The guidance role of teachers was supported by a considerable number of outside-based guidance services such as career service, school psychological service and child and family guidance service. These various forms of guidance are regarded as an intervention aimed at addressing the needs of individuals. Provision of guidance was strongly developed in schools, and a range of services were incorporated such as counselling or access services (for potential students from non-conventional student backgrounds). The use of the guidance concept stretches across education frontiers to cover good parenting, and counselling activities in religious settings. Other concepts such as mentoring, modelling or sponsorship role are related to guidance.

### **Types of guidance**

There are three types of guidance: educational guidance, vocational guidance, and personal and social guidance.

#### **Educational guidance**

This has to do with direction and focus provided for pupils in their choices, and adjustment to the curriculum and school life in general. This entails assisting young people in the selection

of subjects that could enable them to get an education that is congruent with their abilities and interests, which ensures their good performance and success at school.

#### Vocational guidance

This enables individuals to choose an occupation which is consistent with his or her interests. Individuals tend to perform well if they are interested in training for the particular occupation; this invariably brings about fulfilment and satisfaction. They tend to show more commitment to such an occupation if interest levels are high.

#### Personal and social guidance

This finds its expression in the assistance given to individuals in order to maintain good social relationships and interactions. It helps individuals to understand themselves, know how to relate to others, and learn manners. Adolescents interact with various categories of individuals, and members of the opposite gender. In the course of their relationships, they negotiate sexual activities. In view of this, they need to be well equipped with the skills and knowledge of decision-making as this will enable them to deal with such negotiations. Adolescents engage in a series of risky sexual activities arising from faulty decision-making that may lead to their death. The need for guidance by school health nurses becomes urgent in these situations.

#### **Principles of guidance**

- Every aspect of a human being is interrelated so whatever affects one will affect other aspects too. The aggregates of these aspects constitute the complex personality of individuals. Guidance efforts toward bringing about adjustment in any of these elements should take into account the other aspects. The individual's total being is indexed by the effective functioning of all aspects of his or her life. Decision-making is an integral aspect of the expectations of adolescence because of the affiliation and autonomy's needs. Adolescents tend to give in to peer pressure as their peers are a



significant group in their life. The ability to make good decisions enables them to resist peer pressure effectively.

- Individuals are similar in many respects. However, there are still some areas where there are differences. Individual differences can be accounted for by genetic programming and the influence of the environment. Some adolescents may be capable of making good decisions without being guided. However, this may not be applicable to others due to cultural prescriptions and values. There is a need for school health nurses to provide effective guidance while downplaying the assumption that adolescents are capable of making good decisions without guidance.
- The essence of guidance is to help the individual formulate a desirable and realisable goal and to apply those goals in the pursuit of his or her affairs. School health nurses are expected to provide guidance to adolescents in respect of their decision-making on reproductive health in order to achieve maximum health functioning in that area. The tenets of guidance are important in assisting adolescents to achieve their goals.
- Guidance should be considered as a life-long service as an individual requires it from childhood to adulthood. The import of this is that guiding adolescents should not just end in adolescence, rather it should go beyond that level into adulthood, as individuals can still falter at any stage of their life.
- Guidance focuses on how physical, social and mental health can interfere with individuals' adjustment to school, home and social demands. Poor adjustment arises among adolescents when decisions made are faulty and are ineffective in addressing reproductive health issues. The gap that is likely to be created can be bridged when school health nurses offer good guidance support to adolescents in their decision-making on reproductive health.

## **Person-centred perspective**

For school health nurses to be able to effectively guide adolescents in their decision-making on reproductive health, they need to have a good grasp of the perspective which informs guidance activities. This perspective greatly influences the choice and use of guiding skills. The elements of the model are self-actualization and self-concept, and positive regard.

The person-centred perspective has its roots in the humanistic school of thought. The Humanistic school holds that individuals have innate potential that can be harnessed by them to bring about satisfaction and fulfilment in life. This school of thought is of view that every individual has unique tendencies, and the capacity to understand the self.

### Self-actualization

This entails individuals reaching and attaining the best of his or her potential. Self-actualizing persons experience satisfaction as a result of the harmony of thoughts, actions and underlying tendencies. Human motivations encourage us to achieve our individual potential. In a situation where thinking and acting are at variance with tendencies, individuals experience distress, dissatisfaction or a lack of fulfilment in life. Adolescents as individuals are unique beings who like to do things that will bring satisfaction to them. However, this may sometimes run afoul of social norms. This causes distress. They see themselves as autonomous individuals who should not be subject to control by authority figures. They think they have unfettered freedom in making decisions on their reproductive health, and in line with humanistic thinking, they think they should be able to take their decisions unilaterally without any external interference. Constant conflicts do occur where their expectations are not in congruence with that of established order. School health nurses should persuade them of the need for guidance in their decision-making on their reproductive health. The import of this position is that in guiding

adolescents in their decisions on reproductive health, school health nurses need to understand their habits, and then align these with their thinking and acting.

#### Self-concept and self-structure

Self-concept, which develops during infancy, enables individuals to have experiences through which our feelings are given meaning, and it is used as feedback to form an image of ourselves i.e. how we perceive ourselves and the importance we have to others. Self-structure represents the framework which helps in the development of beliefs and values that guide individuals' perception of themselves, of their experiences and the outside world at large. The self-structure grows as time progresses, and it becomes distinct from actual experience in itself. By implication, it receives information about the environment through the five senses. Self-structure becomes functional and active when meaning is merged with experience. Self-concept is an integral aspect of self-structure. Self-structure of a child and even an adolescent encompasses their beliefs about the world, which may include a general distrust of adults. Some adolescents may find it difficult to place their trust in school health nurses in the area of reproductive health decision-making based on their past experiences of adults whom they may have found untrustworthy. The significance of this is that school health nurses should work through the feelings of adolescent students in order to gain their confidence and trust, as this will greatly facilitate guidance activities.

#### Positive regard

Positive regard from others enables individuals to gauge the values and appreciation others have of them. It is a means of enhancing individuals' self-concept. Positive regard from others is an important phenomenon that can motivate actions which will continue to generate acceptance and recognition of such individuals by others. Positive regard creates the basis for self-worth which invariably constitutes self-concept. However, sometimes the behaviour an

individual displays is not congruent with his or her inner self and this may bring dissatisfaction and hence lack of fulfilment. When we act in ways true to our inner being this generates positive regard, and individuals experience fulfilment and actualisation. Such action promotes innovation and naturalness in individuals, and this in turn brings about satisfaction. Self-actualization is impeded if individuals continue to act in a manner that will attract positive regard from people while neglecting their true nature. This is why it is important for individuals to act upon their knowledge of self. The positive regard individuals receive from others, either real or perceived, is the main force driving behaviour. School health nurses require the knowledge of this positive regard for them to be able to situate the influence of peer groups on adolescents. Often authority figures condemn or attack adolescent values for which they receive recognition and acceptance from their peers. School health nurses should accept adolescents for what they are during guidance, and resist the temptation to attack their values or what they stand for. This skill helps in gaining their trust which is needed for effective guidance. Adolescents may be told that taking a decision that eschews negative peer group reproductive health values, may earn them isolation initially, but that this is the means to becoming self-actualizing individuals, derived process which will bring its own rewards.

### **Study unit 5.2: Process of guiding adolescents in decision-making on reproductive health**

Assisting school health nurses on guiding adolescents in their decision-making on reproductive health is the basis of this study. School health nurses need to be equipped with the guidance skills and knowledge required for the purpose. At the end of this unit, learners will:

- Exhibit expected knowledge of interpersonal skills.
- Demonstrate a good understanding of the processes of interpersonal skills.
- Display an appropriate grasp of the guidance process in respect of adolescents' decision-making in reproductive health.

- Demonstrate knowledge of application of guidance skills to decision-making of adolescents in reproductive health.

### **Box ten**

#### **Facilitator's role**



Get the venue ready before the arrival of learners, and position audio visual aids where they can be beneficial. Ensure adequate lighting in the venue. Inform them that the learning will take the modes of lecture, discussion and role play. Ask learners to indicate what they know about the guidance skills that school health nurses need to guide adolescents in their decision-making in reproductive health.

#### **Lecture**



Focus lecture on interpersonal skills needed by the school health nurses on guiding adolescents in their decision-making on reproductive health. Two skills that need to be highlighted are interpersonal and communication skills. Communication skills will be covered in another module to avoid obscuring the vital importance, and the complexities of either area of inquiry. Define interpersonal skills in your lecture as a means of introducing the topic. Teach them about the assumptions of interpersonal skills which are: insight into self and others, development of specialist interpersonal skills by virtue of being in the school health service, strategic use of interpersonal skills which entails making use of tactical interpersonal skills in an unexpected situation, such as guiding adolescents in their decision-making in reproductive health, and overcoming restraints by identifying factors militating against the effective use of interpersonal skills. The lecture should also focus on the processes of interpersonal skills such as self-awareness, self-perception, behaviour, and social problem solving.

#### **Read (Self Study)**



Read more on self-awareness and its relevance, components of self-system, personal identity, internal events such as attitudes, values and beliefs, external events, sense of self as 'agent', and process of self-awareness using the Johari window, social perceptions, and social behaviour.

#### **Activity/Search**



Search for informational materials in texts on interpersonal skills and communication. Internet books and materials are also available. Check the following websites for the related materials and texts.

- Kagan, C and Evans, J. (1995) *Professional interpersonal skills for nurses*. San Diego: Singular Publishing Group Inc.
- Burnard, P. (1996) *Acquiring interpersonal skills: A handbook of experiential learning for health professionals*. San Diego: Singular Publishing Group Inc.
- Haddon, P.F.C. (1999) *Mastering personal and interpersonal skills*. London: Thorogood Ltd.
- Miller, L. (2006) *Counselling skills for social work*. London. Sage Publications

### Group discussion



Direct discussions on the process of guiding adolescents in their decision-making about reproductive health. Building of trust in adolescents should take a central focus in the discussions. Discuss how school health nurses can gain the confidence and trust of adolescents who consult them for guidance. Discuss how school health nurses can maintain confidentiality, openness, and at the same time demonstrate capability. Due to the sensitive nature of reproductive health, discuss how a comfortable environment and a seating plan that will aid guidance can be created. Sitting squarely, openness, leaning slightly toward client, the maintenance of eye contact, and relaxing are all essential ingredients of a comfortable environment. Discuss how guidance activities can be carried out in the context of a person-centred approach which school health nurses have been taught during the presentation. Discussions should further focus on using client-centred skills in guiding adolescents in their decision-making. Discuss the use of interpersonal skills in improving on the attitudes of school health nurses toward adolescents. Discuss further the use of questions for the purpose of clarifying and exploring issues, using reflection as a means of focusing on the last few words spoken by the client, selective reflection, empathy building, checking for understanding of skills. All these are important elements of a client-centred approach. Discuss the following guidance steps: formulation of possible solutions to the challenges presented by adolescents, which is the point at which steps highlighted in decision-making models are crafted; awareness on the part of school health nurses of differences in perception, knowledge and understanding of issues between younger and older adolescents; and cognizance of experiences and perspectives of older adolescents in reproductive health using client-centred skills.

### Facilitator's role during discussion



- Provide an environment conducive to discussion.
- Allow learners to reflect on the outcome of their discussions.
- Encourage them to bring all the strands together.
- Guide them on how they can apply the outcomes to their practice.

### Role play



### First scenario

Ask participants to act out a guidance session where interpersonal and client-centred skills will be displayed. Some of the school health nurses can act the role of a secondary school female adolescent

who has come to seek guidance from a school health nurse regarding pressure being placed on her for sex, by an older male. The female adolescent who is assumed to have come from a poor background is having financial challenges, even to the point of being unable to pay her school fees. The older male individual is ready to assist on condition that he has sexual intercourse with her.

### **Second scenario**

Another session of role play should consider a young male adolescent who is a top achiever, and from a highly religious background. He is not ready for sex yet based on his religious convictions. He is surrounded by friends both male and female who indulge in sexual activities. He is facing alienation and mockery for being unable to “fit in”. He is experiencing conflict as to what he should do. He is gradually showing interest in experimenting with sex in order to gain the acceptance of his friends against the dictates of his religious ethos.

### **Third scenario**

A poor adolescent female is being pestered for unprotected sex. The partner, who is her wealthy lover, has multiple sex partners, and he always insists on having unprotected sex with her. She is confused about whether she should continue to allow him to do this and is concerned about the risk of contracting sexually transmitted infections. She wonders if she should refuse his request at the expense of the financial assistance she receives from him.

### **Role of facilitator during role play**

- Ensure that there are no distractions during role play.
- Gain everyone’s attention during role play.
- Tailor the activities of actors toward the desired outcome.
- Invite comments and opinions from members of the audience.
- Provide the right clues where necessary.

### **Note to the Facilitator**

The facilitator should prepare very well for this lesson as it combines the use of various methods. There is a need to demonstrate clearly an understanding of the content. The facilitator should read different texts on guidance and skills. A wealth of informational materials should be consulted to aid learning of the content.

## **7.8.2. Content of the module**

### ***Requirements for guidance activities***

In order to effectively guide adolescents in their decision-making on reproductive health, school health nurses should possess a good knowledge of interpersonal skills, and communication skills. These are central to the guidance process, hence the need to pay detailed attention to both. Only the area of interpersonal skills was included in this module; communication issues were addressed in a separate module.

## **Interpersonal skills**

Interpersonal skills, which are employed professionally, are regarded as aspects of social skills. They are used in direct person-to-person contact. These skills come in handy when professionals such as counsellors, health educators, or school health nurses work in direct contact with their clients. They are employed deliberately in order to maximize effectiveness in the outcome of health professionals and clients' therapeutic interactions.

### **Assumptions about interpersonal skills**

- Professional interpersonal behaviour in nursing is learnt as school health nurses bring to any new situation some previous learning of interpersonal skills, which are further developed as they become more experienced. The school health nurse may have learnt one form of interpersonal skills before enrolling in nursing, and during their basic nursing programme, before opting for the schools nursing area. The skills, as they progress, are further developed to the point where they become expert in their use.
- It is feasible to see interpersonal behaviour as a combination of different aspects among which are guidance skills. Besides, there exist other skills such as counselling skills and assertiveness skills.
- Interpersonal behaviour as employed by school health nurses comprises cognitive, emotional and behavioural aspects. Simply put, the use of interpersonal skills requires that school health nurses have knowledge and understanding, and are able to apply these appropriately.
- Interpersonal behaviour appears in a complex form and is sustained by basic elements, which combine in different ways for different interpersonal skills.



- The effectiveness of interpersonal behaviour is influenced by a myriad of factors which could be either external or internal. The internal factors may include motivation or knowledge of interpersonal skills, while external factors may emanate from the environment or the context where the skills are needed.

### **Levels of interpersonal skills**

The use of interpersonal skills is hierarchical in nature, especially among school health nurses. Put differently, there are different levels at which interpersonal skills can be employed. The levels involved are as follows:

- Insight into self and others. School health nurses need to gain an understanding of what skills they possess and why they may not be putting them to effective use. The awareness of this may enhance the quality of care school health nurses will render to their clients.
- Development of specialist interpersonal skills. School nursing activities, being a speciality area, are somewhat more sophisticated than what is obtainable at basic nursing level. It then behoves school health nurses to develop their skills beyond what is required at a lower level. This is necessary because their main clients in the school system are adolescents whose pattern of behaviour requires some adaptive interpersonal skills for proper and effective guidance.
- Strategic use of particular interpersonal skills. School health nurses are expected to make use of tactical interpersonal skills in an unexpected situation such as guiding adolescents in their decision-making about reproductive health. This is an adaptive role of school health nurses as it is not indicated as part of their formalized or routinized roles. In order to be able to perform this role effectively, school health nurses have to be tactical and calculated when using interpersonal skills.

- Overcoming constraints. School health nurses need to identify the factors militating against the effective use of interpersonal skills, and address them accordingly. The constraints can be either internal or external. It may be that the school health nurses lack self-awareness or that their personality is unsuited to their career choice, while the external constraints can emanate from clients or the context, which may not be enabling.

### **Processes of interpersonal skills**

Interpersonal skills encompass some processes such as self-awareness, self-perception, self-behaviour and social problem solving. Interpersonal skills are very intricate in nature. They function within personal, social, environmental and cultural spheres.

#### *Self-awareness*

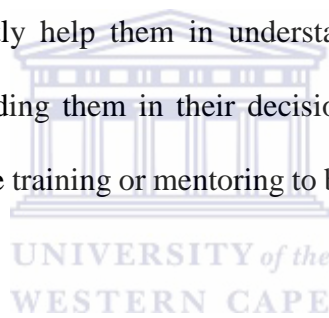
Self-awareness is an important component of professional interpersonal skills. It connotes the knowledge of an individual self. What one thinks, his or her feelings, experiences and future expectations constitute self-awareness. Self-awareness allows individuals to:

- Discern problems of professionals from that of their clients. It assists them to understand their strengths and weaknesses in respect of their values or preferences.
- Draw boundaries between clients and professionals. It shows where the gaps exist which require the input of professionals.
- Prevent stress and exhaustion among professionals. It helps individuals to understand their limits, and adaptive responses to stress. The importance of relaxation and rest, to maintain an optimum level of functioning, is emphasized.
- Bring lucidity and accuracy to the relationships and interactions existing between individuals and clients. This requires some degree of reflection on what we say to the clients in respect of their guidance needs. Clarity and precision will enhance clients' faith in the ability of health professionals to address their issues.

- Be more perceptive to the needs of clients through empathic understanding of events around them. In addition, the response to their needs is expected to be timely because any delay may aggravate their situation.

The development of self-awareness is a process which takes a long time, and is continuous in nature. This is why the support from significant people in our lives cannot be relegated as their input will aid in the rapid achievement of self-awareness. Self-awareness is one of the ways of attaining self-actualisation. Furthermore, different forms of experiences are unified and built into our self-system through self-awareness. Individuals may be insensitive to what others are saying or presenting where deficiency in self-awareness occurs. Self-awareness enhances our responses to the needs of other people. Self-awareness is an important skill school health nurses need to develop as it will greatly help them in understanding the needs and nuances of adolescents in the course of guiding them in their decision-making in reproductive health. School health nurses require some training or mentoring to be able to attain the expected level.

#### Components of self-system



Self-system is the framework that helps in evolving self-awareness. Self-awareness takes off and develops from the constellation of the self-system components. The components of self-system are personal identity, internal events, external events, and sense of self as agent.

#### Personal identity

This refers to how individuals perceive themselves. This has been largely examined within a good number of perspectives. Psychodynamic perspectives argue that individuals are a product of the interplay of events they experience during childhood and adolescence. Self is emphasised as the very essence of adult life while the symbolic interactive perspective holds the view that interactions among individuals help in forming and shaping our identities. Some individuals see themselves as the realistic type whose conduct or behaviour is contingent upon prevailing

circumstances, while others perceive themselves as principled, not easily swayed, or whose actions will hardly vary in different conditions. Individuals' sense of identity can also be influenced by membership of different groups; this is why there is a direct correlation between the sense of identity, and changes in group membership. School health nurses form their identity on the basis of their background, which includes their values, beliefs, experience or membership of their professional associations.

### Internal events

Internal events are occurrences that take place within an individual. These may be bit difficult to capture. Bodily sensations emerge as a result of different physiological changes. These sensations are labelled on the basis of the context in which they are experienced. The positive or negative feelings may be determined by the context. Sensations such as pain, stress, illness symptoms (with no organic cause) can be felt within the body.

Attitudes are also regarded as internal events that may sometimes be a bit difficult to identify. Feelings are an integral part of attitudes, and these may be negative or positive. Attitudes are intangible in nature since they cannot be seen. They are commonly expressed in the form: "I like or hate". They are sometimes measurable, and we make inferences from attitudes about what we think, feel or do.

Values and beliefs are also components of internal events. Our indiscriminate or coordinated responses to stimuli are modulated by our values and beliefs. Values represent the worth placed on a thing, place or idea. They are regarded as views or positions considered to be the best, or about suitable ways of achieving a goal. Values have been established as central to our personal being, guiding us on our moral route, just as they contribute to our cultural or sub-cultural identities. Values are strengthened by social needs such as 'a need to be liked or accepted or a need for power'. However, these values may be challenged, in which case individuals become

defensive, violent, despairing or unresponsive. Consistency in our conduct may be a function of values which bolster our sense of personal and cultural identity. Beliefs represent views attached to values. They are consistent in nature. Individuals' beliefs can change when they have experiences which affect them profoundly. Beliefs are fragmented into shared primitive beliefs, unshared primitive beliefs, authority beliefs, derived beliefs, and inconsequential beliefs. Shared primitive beliefs are widely held in a particular culture while unshared primitive beliefs have to gel with individuals' self-identity and personal experience. Authority beliefs entail legitimate institutions such as hospital or school. The beliefs that emanate from one's father or mother are regarded as derived while inconsequential beliefs encompass past experiences or preconceptions.

#### External events

These form a component of the self-system that aids the formation and growth of self-awareness. They speak to other people about an individual's identity, and are effected through a process called self-presentation which has to do with the roles we perform and the interpretation given to them, in the context of counter roles. In addition, individuals tend to present themselves in different forms based on the existing circumstances.

#### Sense of self as 'agent'

Being a human agent means that the individual is capable of their own decisions and actions. They are conscious of the environmental conditions which may influence their actions. Human agents calculate risks and benefits in the pursuit of their actions. This differentiates them from animals whose operations are below the cognitive level of human beings. Being human agents enables them to exercise control over their space rather than being passive objects, just as they exert control over how others see them or over their self-efficacy. The perceptions that an individual has about his or her control creates a sense of wellness physically and

psychologically and where an individual loses control, or maintains a perceived loss of control over the environment, there could be negative consequences which may affect the well-being of such an individual. This can result in a decline in health or morale. A perceived lack of control may lead to reactance, which is a situation in which an individual feels that he or she is being refused the opportunity of freedom of choice. The import of this for school health nurses is that they should not harbour any feelings of being put down in the context of their relationship with others either in or outside the school system. They must strive to have control over, and dictate the pace of their work. Their actions should be well thought out as this will present them as capable and effective health professionals.

#### Process of self-awareness

The use of the Johari window has been found to be an effective means of achieving self-awareness through self-knowledge and feedback from other people. This is a matrix that has two rows and two columns with the first and second rows portraying ‘what is known to others’ and ‘what is unknown to others’ respectively while the first column indicates ‘what is known to self’ while the second column has ‘what is unknown to self’. Four statements were produced after criss-crossing the columns and rows.

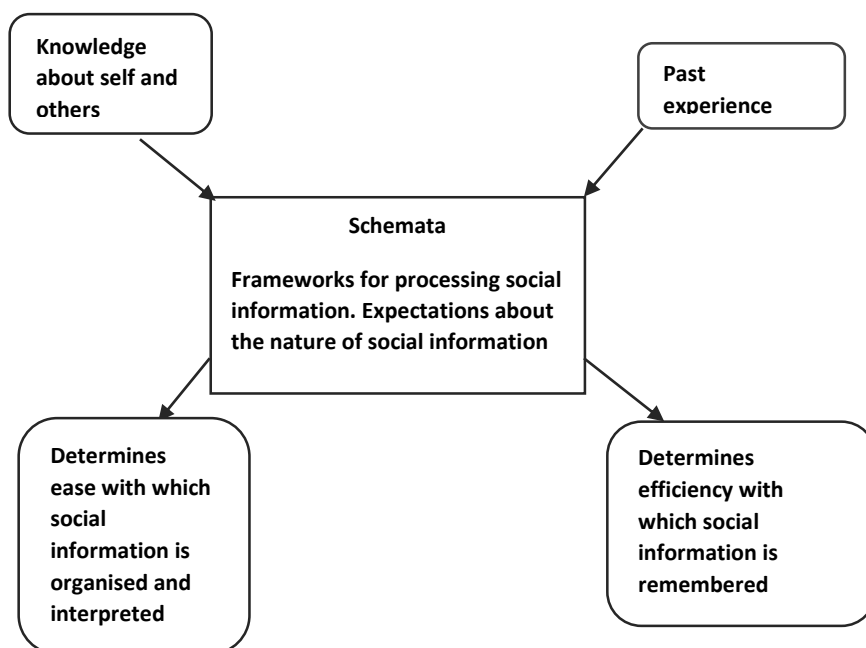
	<b>Known to self</b>	<b>Known to others</b>
<b>Known to others</b>	<p><i>A public self</i></p> <p>What I know and I present to others so that they know it too.</p>	<p><i>A blind self</i></p> <p>Those aspects of me that I am unaware of but that others see and judge me by</p>
<b>Unknown to others</b>	<p><i>Private self</i></p> <p>What I know but I do not want other people to know or to discover</p>	<p><i>Unknown self</i></p> <p>What I do not know, or do not (want to) recognize, and that others are not aware of</p>

**Fig 7.3: Johari window (adapted from Kagan, Evans, and Kay, 1986)**

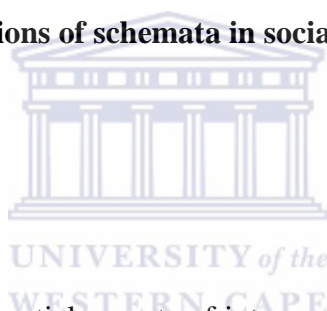
It is instructive to note that it may not be possible to attain full self-awareness due to some circumstances beyond the control of such an individual. However, school health nurses can intensify their efforts toward augmenting their personal relationships with their clients in order to achieve better guidance outcomes.

### *Social-perception*

Social perception is imperative in the development of interpersonal skills. As human beings grow, they develop mental structures regarded as schemata. Schemata are a function of human awareness of itself, other people, and overall life experience. Social information processing and its efficiency is facilitated by schemata. They assist us in choosing what we observe and identify in other people. In view of the fact that past experience contributes to the formation and development of schemata, an individual may be prejudiced in forming opinions about others. Existing circumstances determine the way we construct and reconstruct social events and their attendant meanings. In the course of doing this, we are inclined to bias in our views of other people. These biases in perception occur in the context of the expected events or behaviour. School health nurses should be careful in imposing their values in the course of guiding adolescents in their decision-making on reproductive health. They should recognise that their own experiences are different from those of adolescents, hence the need to avoid pre-conceived opinions about adolescent behaviour. School health nurses should be less judgemental in the manner guidance is conducted, in order to be able to understand the world of adolescents.



**Fig 7.4: Development and functions of schemata in social perception (Adapted from Kagan, Evans and Kay, 1986)**



### *Social behaviour*

Social behaviour is one of the essential aspects of interpersonal skills. In using interpersonal skills, it is compulsory that social behaviour in terms of communication with others is employed, as this happens to be the only means through which intents, purposes, attitudes or feelings can be transformed into action which others can appraise and appreciate. Social behaviour is expressed in two forms, verbal and non-verbal forms of behaviour. The dominance of either of the two is a function of environment or context where it is employed.

In view of the complexity of this aspect, and for the purposes of comprehensiveness, a separate module entitled *communication skills* was created (see module six).

### ***Process of guiding adolescents in decision-making on reproductive health***

It is incumbent on school health nurses to develop a relationship which will yield trust and confidence on the part of adolescents as a preliminary step toward guiding them. Adolescents



have a high regard for confidentiality regarding their reproductive health issues. School health nurses need to reassure adolescents that whatever they discuss will be kept confidential. Trusting relationships will constitute a good platform for effective guidance by school health nurses. Trust is enhanced in a school health nurse and adolescent relationship when the nurses are open, demonstrate capability, are practical, involved and able to share the control they have. They are further expected to be readily accessible and create a good atmosphere for guidance. Trust creates an avenue for clients to alleviate their tension, and enables them to recover their sense of control when they are experiencing stress as a result of dilemmas around reproductive health issues. As indicated in the findings, the adolescents indicated their lack of trust and confidence in school health nurses and this may hamper cordial relations. The process of guiding adolescents' issues concerning reproductive health further requires the following activities:

- Adolescents should be provided with guidance in a comfortable environment, preferably a sound proof area. This is to ensure privacy. Reproductive health is a sensitive and uncomfortable topic for adolescents. In a comfortable, open space, nurses should sit facing the adolescent squarely instead of sitting beside them. They should maintain an open posture i.e. sit in a relaxed and comfortable manner. They should lean slightly forward to the client, and maintain eye contact. School health nurses should relax while listening to the client. All these steps make adolescents feel relaxed and inclined to open up on reproductive health matters or other issues that require taking decisions. It is also part of the preliminary process of building trust between adolescents and school health nurses.
- Guidance activities should be carried out in the context of a person-centred approach. School health nurses need to demonstrate that they understand their thinking and feeling, and show empathy, accepting the adolescents for who they are rather than being

judgemental. Simply put, school health nurses should accord adolescents who come for guidance unconditional positive regard in their decision-making about matters of reproductive health. This unreserved acceptance helps to enhance the trust and confidence adolescents would have in school health nurses, and upon their knowledge of this acceptance, they will feel free to share their feelings, worries, problems or challenges with school health nurses, thereby relying on whichever direction school health nurses advise them to follow. In a situation where school health nurses demonstrate conditional acceptance of adolescents, who then conclude that he or she is judgemental, guidance in this situation may well be ignored.

- School health nurses need to employ client-centred interpersonal and communication skills in guidance such as using questions to elicit opinions and thoughts about issues on which they have come to seek guidance.
  - Questions are used for the purposes of clarifying and exploring issues, and also a means of motivating the client to open up.
  - They should use reflection as a means of focusing on the last few words said by the client. School health nurses can paraphrase what has been said to show that they are listening, to help the idea gain presence in the conversation, and to help the client elaborate further.
  - Selective reflection is also one of the skills needed to effectively guide adolescents in their decision-making on reproductive health. It makes use of repetition of what clients have said, as a discussion segue, or drawing further attention to aspects that seem to be sensitive. This will convince clients that the school health nurse is following the discussion assiduously, and this further promotes confidence and trust in the nurse's ability to address the issues on the table.

- Empathy building is one of the client-centred skills used in guiding adolescents. The school health nurse makes statements or says things that convince the clients that the nurses understand him or her. And the client believes that the school health nurse is working through his or her feelings.
- Checking for understanding as a skill requires asking the client whether the school health nurse has understood him or her correctly. Summing up what has been said by clients helps to ascertain whether the school health nurse has captured their meaning accurately.
- After gathering enough accurate information with adequate clarifications in respect of the issues or problems presented by an adolescent, the school health nurse needs to formulate possible solutions to the challenges. In the course of guiding adolescents, school health nurses should highlight the steps involved in decision-making, and the factors that could influence them in the course of making a decision.
- In the course of guidance activities, the school health nurse needs to be aware of differences in the perceptions, knowledge and understanding of issues between younger and older adolescents. Younger adolescents are more inclined to the tangible, the concrete. There is the need here to use visual aids, drawings or demonstrations to present information in a more accessible manner. The school health nurse is expected to motivate younger adolescents to share their feelings, and any aggression expressed by them should be handled carefully as this might be a reaction to parental or adult control.
- In guiding older adolescents, awareness should be shown, of the fact that they have their own experiences and perspectives. This would necessitate the school health nurse knowing something about their interests, especially in reproductive health. The school health nurse should let them talk about their experiences relating to

reproductive health drawing any conclusions about their whether they are sexually active or not. Each individual should be treated as unique and caution needs be exercised – the nurse should not assume that the sexual interests of one adolescent is the same those of another. The nurse should use the questioning method, especially open-ended questions to obtain vital information from adolescents which she or he can use to effect proper guidance. The nurse should further realise that adolescents might feel uncomfortable, and let them know that their feelings are normal.

- School health nurses should teach adolescents the decision-making skills in reproductive health, and how they can apply them in achieving optimal reproductive health outcomes. These skills will be of immense help to school adolescents in developing their confidence in making responsible decisions on reproductive health.

The decision-making skills are as follows:

- Complexity. Complexity has to do with the simultaneous consideration of elements in a systematic manner. This involves bringing the different aspects of a decision together. School health nurses should teach adolescents how they can bring different facets of a decision into consideration. Adolescents want to have education, freedom, sexual relationships or satisfying peer group relationships. School health nurses should help them in bringing these needs together so that they can reach decisions that will satisfy all those elements.
- Thinking about possibilities enables an individual to determine whether a selected option will have a consequence. This requires that an adolescent be taught about deductive and inductive reasoning.

- Solving problems arising from decision is an important skill. Adolescents should be taught to seek alternatives regarding an issue with each alternative being evaluated on its merits. Teaching them about different alternatives can make use of the different strands attached to the consequences of an action. Taking unprotected sex as an example, the consequences could include unplanned pregnancy, HIV/AIDS, obstructed labour. In this case, school health nurses need to advise that the available alternatives may include abstinence or, engaging in protected sex.
- Relativistic thinking is a skill that requires that an action is a function of the context in where it is taking place. Put differently, decision-making may be influenced by the social context. This includes beliefs, values, family and religion. In view of this, adolescents should be taught the skill of understanding other people's perspectives and the influence of these on their decisions.
- The ability to think logically is a skill that will enable them to reflect on their decisions. This is sometimes referred to as counterfactual emotions, examples of which are relief and regret. Regret enables individuals to detect the decision they ought to have taken. It allows a decision maker to anticipate this emotion based on previous decisions taken.

## **7.9 MODULE SIX: COMMUNICATION**

### **Purpose of the module:**

- ❖ To demonstrate the influence of communication as one of the skills required for guidance and effective interaction.

### **Study unit 6.1: Interactions with adolescents and school teaching staff**

Communication is an integral component of guidance skills and an essential ingredient in building good relationships with both the adolescents they guide, and the school academic staff with whom they have a working relationship. After this study unit, learners will:

- Describe different types and modes of communication
- Describe the interpersonal communication required for building relationships with adolescents and teaching staff
- Demonstrate understanding of the application of communication skills in developing interpersonal relationship with adolescents on the one hand, and school staff on the other.

### Box Eleven

#### Facilitator's role



Let them be aware of the topic they are going to learn. Communication is a familiar topic. Use the discussion method to address the issue. Prepare the environment and ensure that they are prepared for learning.

#### Read (Self Study)



Read about communication, definition, types, modes and factors influencing communication, and how school health nurses employ communication skills during guidance sessions with adolescent students in secondary schools.

#### Activity/Search



Conduct an internet search on communication materials, especially in the health care system. Consult texts for more information about communication. Check the following sources:

- Career Skills Library. (1998) *Communication skills*. New York: Ferguson Publishing Company
- Kraszewski, S and McEwen, A. (2010) "Communication: Fundamental Skills". In S Kraszewski & A. McEwen, eds. *Communication skills for adult nurses*. Berkshire: Open University Press

- Wood, J.T. (2010) *Interpersonal communication: Everyday encounters*. Australia: Wadsworth
- <http://www.practicebasedlearning.org> Communication skills
- <http://www.bookboon.com> Effective communication

### Group discussion



Engage in discussions on communication. Allow learners to share their knowledge and experiences of communication with each other. Discussion should be geared towards describing different types of communication which may include: mass communication, public communication, small group communication, and interpersonal communication. Discuss the differences among these four types and focus greater attention on interpersonal communication as it is the most relevant to guidance activity. Discuss the features of interpersonal communication which may include: the dynamic process, being unrepeatable; sensitivity to what people say or do and the impact of these on us and others; and wholeness. Discussions further focus on the principles of interpersonal communication that include: we cannot not communicate, meta communication and how it affects meaning, interpersonal communication which develops and sustains a relationship but is not a panacea, and the fact that effective interpersonal communication can be learned. Discuss the modes of communication - specifically verbal and non-verbal communication, and the models of communication, namely linear and transactional. Discuss the processes of communication which entail sending a message, receiving a message, feedback, and context. Debate the influence of noise on communication, specifically physiological, psychological, intellectual, environmental, semantic forms of noise. Extend the debate to cover the requirements for interpersonal communication competence which includes the development of an array of communication skills such as listening and feedback skills, adaptation toward meeting expected goals and needs; demonstration of dual perspective .i.e. showing an understanding of one's perspective and that of others, monitoring communication outcome, and commitment to effective and ethical interpersonal communication. Discussions should be as comprehensive as possible for everyone's benefit. Discuss how you can negotiate the support of the school authorities and teachers in achieving the goal of guiding adolescents in their decision-making about reproductive health.

### Facilitator's role during discussion



- Allow them to reflect on what they have discussed
- Use the outcome of their reflections to generate further discussion
- Encourage everyone to contribute to discussions
- In view of the interesting nature of the topic, prevent anyone dominating the discussions.
- Provide adequate information in response to questions, and for clarification.

### Role play



### First scenario

Act out a scenario where a school health nurse is teaching the decision-making skills needed in reproductive health to a school adolescent.

### **Second scenario**

Display the communication skills needed to convince the school principal a school health clinic should be located in an obscure place and not an open place, as the principal has suggested.

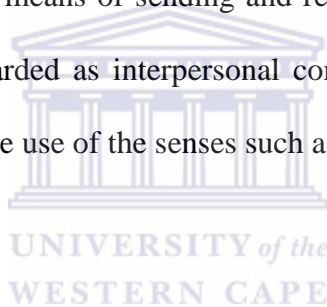
### **Note to the Facilitator**

Prepare adequately for the lesson by consulting a broad range of materials on communication. Learners are more likely to ask questions on some conceptual areas such as models of communication and the process of communication.

## **7.9.1 Content of the module**

### *Communication*

Communication is the reciprocal means of sending and receiving messages between two or more people. It can also be regarded as interpersonal communication since information is passed between people through the use of the senses such as seeing, touching and hearing one another (Petrie, 1997).



### **Types of communication**

There are different types of communication. These include mass communication, public communication, small group communication and intrapersonal communication.

#### Mass communication

Mass communication finds its expression when a message is sent to a large audience simultaneously without the creator of the message necessarily being present physically, such as with in radio and television communication. The audience may not have the ability to respond to the speaker at the moment communication is taking place. However, the use of sophisticated equipment in the contemporary times has enabled the audience and the speaker to create and receive feedback from each other. Mass media is a means of transmitting



messages to a large group of people especially on the state of the nation's affairs, health issues or other issues that require public awareness.

#### Public communication

This occurs when a speaker physically talks or addresses an audience in person. It enables the audience to have closer contact with the speaker while the speaker is able to capture the mood and reaction of the audience.

#### Small group communication

This takes place among a group of individuals ranging from three to fifteen meeting or interacting to achieve a common goal or purpose. This type of communication further allows for the creation of interpersonal communication.

#### Intrapersonal communication

This is implicated in a situation where one talks or communicates with oneself. This can be found when an individual engages in thinking or cognitive activities.

#### Interpersonal communication

Interpersonal communication is a form of human communication which is very distinct and transactional as it involves reciprocal influence aimed at managing relationships.

For the purpose of this training programme, interpersonal communication will be considered in details

Interpersonal communication is characterized by viewing individuals as unique persons rather than seeing them as mere objects. They are regarded as individuals capable of initiating and negotiating discussions and deliberations that may lead to goal realisation. Interpersonal communication encourages and promotes collective forms of interaction rather than being

individualistic in nature or where opinions are foisted upon others. Simply put, it allows for genuine discussions and provides for the mutual sharing of feelings and emotions.

### **Features of interpersonal communication**

Interpersonal communication possesses some characteristics which make it distinct and differentiate it from other types of communication. It is a dynamic process being unrepeatable, irreversible, learned, and characterised by wholeness.

- A dynamic process is demonstrated by the ongoing and continuous nature of interpersonal communication. It is always in a constant state of fluctuation. The components are interdependent. The communication between both parties is reciprocally negotiated. Simply put, what one says influences the reaction or response of the other.
- Being unrepeatable means that no two contacts are exactly the same. Each contact is unique. It will be practically difficult to reproduce the emotions, feelings or discussions from one contact in another.
- The discussions and events, especially the effect that had taken place in the course of having a contact, cannot be obliterated. What has been said or done cannot be undone.
- Communication with others may not be effective if we are oblivious of what we say or do and the impact that these have on us and others. We tend to acquire and learn some of the values essential to interpersonal relationships.
- Wholeness is a feature that focuses on the individual as an entity not just an individual one communicates with. Their involvement in the interpersonal relationship has to be considered in all facets: their cultural background, knowledge, values, educational background, how they respond to issues, or their level of maturity. This feature further

espouses non-summativity. Simply put, one can understand individuals better by looking at the whole of their features rather than individual aspects.

### **Principles of interpersonal communication**

- We cannot not communicate. This is a cardinal principle as it reveals that as long as we remain human, we cannot avoid communicating with each other. It is through communication that our needs, feelings and emotions are conveyed to others in a reciprocal manner. Communication is either expressed verbally or through non-verbal means. Silence is a form of communication which may be interpreted in different ways such as meditation, engaging in thinking, or studying.
- Interpersonal communication is irreversible. What has been said cannot not be retracted hence the need to be conscious of what is communicated to others. Communication among people affects their emotions and feelings. The individuals engaging in interpersonal communication should be careful of what they say and how they respond so as not to affect other people's emotions negatively.
- Interpersonal communication involves ethical choices. This implies that, through communication, we influence one another, and it follows that what we say and our attendant actions should be chosen carefully in order to maintain people's interests. Interpersonal communication is irreversible. What one says cannot be unsaid hence the need to be circumspect in our communication. Our values which appear in the form of ethical principles modulate our communication.
- People construct meanings in interpersonal relationships. There is no absolute meaning in what is communicated among people. The meaning and understanding are constructed against the context in which the communication takes place. Meanings are

shared among the parties involved. Where there are no shared meanings, communication cannot be effective.

- Meta communication affects meanings. Meta communication is communication about communication. It can be expressed verbally or through non-verbal means. When a behaviour or action is observed by any of the parties to the communication, it may be regarded as Meta communication. When annoyance is displayed by one of the parties during communication, and this is observed, noted or voiced by the other, we can say Meta communication has taken place.
- Interpersonal communication develops and sustains relationships. These include both verbal and non-verbal forms. Interpersonal communication is the primary means of building, refining and transforming relationships. It is through interpersonal communication that intent, goals, purpose and needs are expressed. It is through communication that a school health nurse and an adolescent would build a relationship. The friendly countenance of the school health nurse would help inspire confidence in the adolescent seeking their guidance. The relationship develops to the point of establishing trust between themselves or, put differently, the adolescent develops trust in the school health nurse to the point at which they can be open regarding issues of their reproductive health. This relationship becomes an enduring one if there is no feeling of betrayal on the part of the duo. Tolerance, understanding, confidence and trust are implied in a good relationship. This relationship is required for effective guidance of adolescents in their decision-making about reproductive health.
- Interpersonal communication is not a panacea. Communication helps in clarifying our needs and strengthening our relationships. It is not all-encompassing as it cannot solve certain problems like hunger, human right abuses, intimate partner violence, or disease.

The use of communication in solving problems is not universally acknowledged since there are some societies in which discussion on certain issues are restricted.

- Effective interpersonal communication can be learned. The art of communicating with one another person can be learned by observing a skilful communicator, by reviewing what was being said or by reading books about communication. Individuals can improve their communication skills by studying the responses and reactions of the people they are communicating with. This enables them to understand how to direct discussion.

### **Modes of communication**

Verbal communication has to do with the use of actual words in conveying messages to other people. A subset of verbal communication is paraverbal communication. This portrays the feelings of the sender despite exhibiting some form of neutrality. The tone and volume of voice can signal what the sender intends. In addition, the speed of speech also contributes to the meaning of the words.

Non-verbal communication does not involve the use of words in transmitting messages to people. The non-verbal communication may include gestures such as a look, a facial expression or touch. These can precede or follow verbal communication. It is a powerful form of communication since it portrays the emotions, feelings and reflections of what was said. The interpretations of these cues are context-specific e. g. eye contact, nodding and shaking of one's head, facial expression, and touch. Eye contact may be used to encourage or discourage an individual from pursuing a line of action. Simply put, it could be used to convey the approval or disapproval of a proposition. Nodding, in some cultures, signals agreement, while head-shaking reflects an objection or dissent. Touch is a means of reassuring or placating an

individual especially when traumatised. Body language captures the whole of the involvement of all body parts with their associated, culturally-based interpretations.

### **Models of communication**

Models of communication explain the principles and concepts of communication. Two types of theories have been identified:

- The linear model
- The transactional model

The linear model emphasises the transmission of messages from the sender to the receiver through a medium. The message is relayed by one or more of the five senses (sight, taste, smell, hearing or taste). The model assumes that interpretation of the message is devoid of any coloration. Simply put, the message is not inclined toward any subjective meaning or interpretation. This kind of communication holds sway in the corporate world where direct instructions are given and which require the attention of the receiver irrespective of their sentiments.

The transactional model focuses on the communication activities that take into account the context, culture, and other subjective tendencies such as values, knowledge, communication ability, internal frame of reference, or role. Both sender and receiver are influenced by these factors and they invariably affect how the message is encoded and decoded. The importance of these models is that the success of communication depends on how well the socio-cultural factors can be managed to engender a positive outcome.

## Processes of communication

These entail the steps involved in initiating, transferring the message, and getting feedback.

The elements of communication include: the sending, channelling and receiving of the message, its feedback and the context.

### Sending a message

It is a representation of an idea one intends to transfer. Sending a message requires that it is encoded into words, tone and modulation. The purpose of the message is to elicit an action or response from the receiver towards meeting a goal. In sending a message, the following skills are required:

- The ability to think clearly, which will enable the sender to send an accurate and purposeful message. The message should be packaged in such a way that it will encourage the desired response
- The message should be expressed explicitly in plain language that the receiver can understand
- The ideas contained in the message should be logically connected so as to be clear.

The sender may use self-awareness and self-knowledge in improving his or her control of this skill.

### Channelling

Channelling is the medium used to deliver the message. It can be achieved face-to-face, by telephone, in writing, through a radio or video-communication, or by pager.

- Face to face is used when the sender and receiver are in close contact or in close range.

It is the most desired among the means of communication. They are able to maintain

eye contact which may have a bearing on the direction and intended outcome of the communication that is taking place. It allows for the duo to pick up non-verbal cues in addition to which, both communicators can receive and evaluate feedback concurrently.

### Receiving the message

This is an important element in the communication process since the message has arrived at its intended destination. The message sent must be accurately decoded by the receiver so as to decipher the intent the message conveys. School health nurses should understand that decoding a message is subject to an individual's culture, values, knowledge and understanding.

Effective decoding of a message requires some skills. These include:

- Active listening skills which will enable the receiver to understand the message and its attendant nuances. The active listening skills are as follows:
  - One should listen actively to the sender. He or she should stop talking and be attentive. Attention should be maintained by maintaining eye contact, nodding or smiling when necessary.
  - Distractions should be removed or minimised. Distractions such as movements, sounds from electronic gadgets, crying or laughter should be reduced. This will create the impression that the speaker is being given due attention. The receiver of the message should remain attentive
  - One should be receptive to the other by smiling or looking relaxed. This sets the tone for an environment conducive of communication
  - The receiver should assume an attitude of interest and trust during communication. This helps in building confidence in the sender and encourages them to express themselves openly.



- Seeking details where necessary is a good listening skill. The receiver can prompt the sender to provide further explanation and clarity to prevent the misinterpretation of messages.
- The evaluation of the message should be delayed until its full comprehension is attained. This allows for accurate responses and feedback.

## Feedback

The effectiveness of communication hinges on feedback. It is the response to a message. It enables the parties in communication to take appropriate and relevant action. It is cyclical in nature so long as the communication continues. School health nurses should be cognizant of feedback to bring about effective communication. A feedback loop is created in the course of responding to messages by both the sender and receiver. Effective feedback should possess the following features:

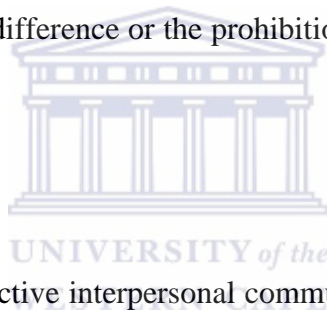
- Regularity of feedback should be ensured. This allows for continuity to be maintained.
- It should be reciprocal between a sender and receiver. Mutuality is one of the main features of interpersonal communication. The feedback should come from both parties in the communication. This enables them to achieve clarity of goals, intended action or action taken in respect of the substance of discussions.
- Feedback should aim at improvement. Communication should be purposeful and geared toward suggesting appropriate measures to enhance the situation at hand.
- Feedback should incorporate actions arising from decisions taken by the parties. Put differently, feedback should be action-oriented.
- Objectivity should constitute the basis of feedback. The information provided must be authentic hence the need to seek first-hand information which is verifiable.

In providing feedback, the parties involved need to be conversant and familiar with feedback skills which include, but are not limited, to the following:

- The parties should be precise in their feedback. It must focus on definable issues rather than being vague and general. The feedback should aptly describe the situation or events in order to serve as a guide for further actions.
- The feedback should provide solutions to problems, issues or challenges. Where it is possible, feedback should be delivered face-to-face and one-to-one. In this way, subtle reactions may be observed.
- School health nurses should be sensitive to people's self-concept hence the need to package the feedback in a positive way even if it is negative in appearance.
- The feedback should be problem-centred rather than being person-centred. It should aim at solving problems instead of attacking the personality of the sender or receiver. Simply put, one should refer to what one does rather than what one is. A condescending attitude during feedback may not enable other party to appreciate what issues are at stake.
- Feedback should be descriptive rather than being evaluative. It should merely describe the events as they happened, and the effects of these events on the parties involved rather than appraising the feedback in term of being good or bad.
- The usefulness of feedback is better appreciated when it is made promptly in order to allow for quick intervention in addressing issues or challenges that require urgent attention.
- The feedback should contain only the pertinent information the receiver will be able to use. The receiver may not be able to effectively use the feedback if he or she is being overwhelmed with superfluous information.

Context

Context is another important element in the communication process. It is a reflection of the background or environment in which the communication takes place. This background has a major influence upon behaviour i.e. one's behaviour is influenced by the context. The context comprises culture, values, and preferences. A specific context, such as school environment, may shape the kind of interpretations people attach to concepts and issues. For example, the issue of reproductive health may be interpreted based on school values especially if the schools are owned by religious organizations. The physical setting where communication is taking place can influence it. In the same vein, response is shaped by context. Feedback from a communication between an elderly individual e.g. a school health nurse and an adolescent student may be influenced by this context because the adolescent may not feel free to express himself or herself due to the age difference or the prohibition of sexual discussions especially among youth.



## Noise

Noise constitutes a barrier to effective interpersonal communication. Anything that interferes with a message being decoded or interpreted as intended can be regarded as noise. Noise causes a distraction to a communicator and results in poor interpretation and understanding of the messages communicated. School health nurses should be mindful of what could constitute noise. Noise can find its expression in different forms. These include physiological, semantic, psychological, intellectual, and environmental noise.

- Physiological noise may result from a personal ailment; physical challenges such as speech, visual, auditory or memory impairment; and discomfort. An individual experiencing pain may find it difficult to properly decode a message and by extension, interpret it properly. Where physical challenges are evident, there may be an interference with the perception of the messages.

- Semantic noise arises from poor understanding of the intended meaning of some words or the context in which the words are being used. The use of technical jargon in sending message may cause confusion as the other party may not understand the jargon. The significance of this is that the professionals should employ simple language, or present their information simply so that it is accessible to clients. School health nurses should communicate with adolescents in plain language so that they can fully benefit from the guidance process.
- Psychological noise may arise from anxiety, confusion or past experience.
- Intellectual noise expresses itself as information overload or inadequate information. The amount of information supplied to individuals should correlate with their ability to use the information. Too much information may result in confusion.
- Environmental noise is a distraction from the immediate surroundings of communicators which can occur as a result of sound coming from vehicles, bad smells, or negative sight or feel of the environment. Distraction could arise from altercations among individuals in the area.

### **Requirements for interpersonal communication competence**

As one progresses in communication one will develop their competence. Competence requires that school health nurses observe a certain ethos in communication. The following are required for the development of competence in communication:

- The need to develop an array of communication skills for each element of communication. These skills enable one to improve their communication ability. Some of these skills include listening skills or feedback skills. Individuals should communicate supportively while clearly expressing themselves.

- The essence of communication is for the expression of needs, feelings and emotions. Through communication, goals and intents are met. It follows that communication should be adapted toward meeting the expected goals and needs.
- School health nurses are expected to engage in dual perspective as a means of developing competence. Simply put, they should be aware not only of their own perspective but other people's perspective as well. Inability to demonstrate this skill may hamper the successful outcome of communication activities.
- Monitoring communication and outcome is another skill that affects competence in interpersonal communication. School health nurses should filter their messages before sending them, to filter out those that are offensive. The feedback skills should be well applied in monitoring the communication. The messages should convey what was intended by communicators.
- Committing to effective and ethical interpersonal communication will assist the communicators in achieving competence. Communicating ethically implies that you regard an individual as a unique and valuable being. People should not be treated as mere objects but should be seen as individuals with feelings or emotions. The communicators should respect the values, ideas and feelings of the other person. Communicators that demonstrate competence should observe the dictates of the process of communication and realize that it is an interactive and evolving process. School health nurses should also realise that communication is irreversible.

## **7.10 SUMMARY**

This chapter discussed the expectations of the intervention design and development model phase relating to the development of the training programme (Thomas & Rothman, 2013: 36). Training content, training materials and resources, and the methods of delivery of the content were discussed. The training programme for school health nurses on guiding adolescents in their decision-making about reproductive health was developed. The development of this

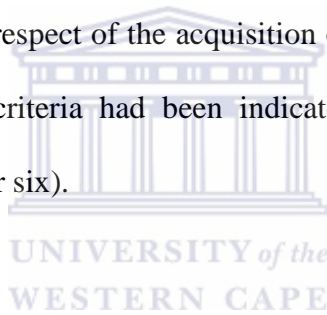
training programme was informed by the findings arising from both the qualitative data analysis and integrative review undertaken. Six modules were constructed in the training programme. These are designed to strengthen the knowledge and skills of school health nurses in the provision of guidance to adolescents in their decision-making about reproductive health. The next chapter will discuss the pilot testing of the programme for its effectiveness.



## **CHAPTER EIGHT: PILOT TESTING OF THE TRAINING PROGRAMME**

### **8.1 INTRODUCTION**

Implementation of the developed programme was achieved through the pilot testing. Pilot testing is an integral aspect of phase four of the intervention design and development (Rothman & Thomas, 2013: 9). This phase was partly used in addressing objective five, and fully used in addressing objective six of the study (see chapter one for the details). Pilot testing entails implementation and assessment of the training programme developed for school health nurses in order to assist them on guiding adolescents in their decision-making about reproductive health. The assessment took both formative and summative forms. The pilot testing of the programme enabled the researcher to appraise the programme for compliance with the design requirements and its outcome in respect of the acquisition of knowledge and skills by school health nurses. The assessment criteria had been indicated in the design of the training programme (See details in chapter six).



### **8.2 PILOT TESTING**

Pilot testing is a means of deciding on whether an intervention programme will meet the design criteria and the specified objectives (Fawcett et al. 2013: 36). Simply put, it enables the researcher to determine the process and outcome of the programme implementation. The aim of the pilot testing was not about full evaluation of the training programme. Rather, it is a means of ascertaining whether it will work i.e. “to see if the bird will fly” (Fawcett et. al 2013: 36) as the full scale evaluation can only occur in the fifth phase (evaluation and advanced development) of the intervention design and development model (Rothman & Thomas, 2013: 36) and which is beyond the scope of this study. Activities in the design, development and pilot testing phases are interwoven, and therefore, iterative. Successful pilot testing is a function of good programme design which encompasses content creation, teaching methods, delivery formats, and the assessment of all of these. The pertinent questions being raised during the pilot

test are about acceptability and feasibility of the intervention programme (Sidani & Braden, 2011: 12). Acceptability refers to participants' opinions of the intervention in respect of being appropriate, and useful while feasibility concerns the convenience with which the intervention programme is put in place (Sidani & Braden, 2011: 12). Whether it can be repeated to arrive at the same outcome using a similar approach, its simplicity, its practical application at work sites, its adaptability across contexts, and its compatibility with context's values and practice (Fawcett et al. 2013: 37). All these questions constitute the basis for the application of design criteria to the preliminary intervention concept or prototype. Design criteria are the specifications that must be met in the course of the implementation of the programme and include: programme objectives, adequacy of learning content, appropriateness of training methods, allotted time, and conformation of the implementation to these design criteria through assessment.

Pilot testing of a training programme requires that the operations are carefully planned and implemented. The order of operations is as follows: recruitment, implementation, outcome measures, analysis, results and discussions.

### **8.2.1 Recruitment of participants**

School health nurses constituted the target of the training programme as the purpose of the intervention was to look for a way of assisting them in guiding adolescents in their decision-making about reproductive health. School health nurses in a different local government area were used for these pilot activities. School health nurses who were involved in collecting data for this study were not included in the pilot. It has been observed that individuals who participated at the collecting data stage are likely to respond differently because of their earlier exposure to the questions or issues that will eventually come up during pilot testing (Van Teijlingen & Hundley, 2002: 33). There were eight school health nurses working in various secondary schools in the local government area. All the eight school health nurses were



contacted for the workshop, however, only six were available for the pilot test, while the remaining two were on study leave outside the State.

**TABLE 8.1: DEMOGRAPHIC CHARACTERISTICS OF PILOT TESTING PARTICIPANTS**

Participant	Gender	Age	Qualification	Experience (Years)
1	F	37	RN, RM	7
2	F	36	RN, RM	6
3	F	34	RN, RM, BNSc	7
4	F	34	RN, RM	6
5	F	35	RN, RM	6
6	F	34	RN, RM	6

#### Pre-requisite skills and knowledge

- The participants must be working in a secondary school as school health nurses.
- They must be in constant touch with secondary school adolescents.
- They must be familiar with some of the concepts such as reproductive health or adolescence.
- They must understand, at least, the basic roles of a school health nurse.

#### Attitudinal and motivational characteristics

- School health nurses acknowledge the consequences of not guiding adolescents in their decision-making about reproductive health.
- Some of the school health nurses coming as participants may believe that they may not gain or learn anything based on their past experiences.
- Some of the participants may be motivated because of the multi-level role they play in and out the school health service.

## **Prior experience**

School health nurses have always rendered some reproductive and other health services to adolescents in secondary schools which may not specifically include well-structured guidance for adolescents in their decision-making about reproductive health.

### **8.2.2 Workshop setting**

Pilot tests are implemented in settings that are suitable for the researchers which are similar, to some extent, to the ones in which intervention will be used (Fawcett et. al 2013: 36). The place used for the training workshop was negotiated by the gate keepers in the Ministry of Health. The State's School of Nursing was offered as the place for the training to take place. Its location was equidistant to the various workplaces of school health nurses that came as participants. A 30-seat capacity seminar room was provided by the principal of the school upon production of a letter from the gatekeepers. The seminar room was a well-lit and had good ventilation. The chairs and tables were well arranged. The school environment is conducive to training with few distractions from the immediate surrounding activities and vehicular movement.

### **8.2.3 Equipment/Materials**

Materials and equipment that were available for use in the seminar room included a white board, two portable projectors, two markers, one board cleaner, one lectern, projector screen, public address system, two large tables, and electrical appliances such as sockets, adaptors and a laptop. In guarding against an erratic power supply, there was a standby generator set filled with adequate fuel. Some teaching materials were made available upon request and were displayed. These included posters of reproductive health systems, posters on communication processes, and different posters about adolescent reproductive health components. The researcher provided copies of an abridged version of the modules after the training workshop.

Some texts and materials on adolescence, reproductive health, decision-making, guidance and communication were provided.

#### **8.2.4 Human resources**

The human resources for the training workshop included the researcher (who also doubled as a trainer/facilitator) and another trainer (facilitator) from the Ministry of Health both functioning as facilitators. The trainer holds Baccalaureate degree in Nursing, and a Master's degree in Health Management and Planning. Three observers were selected for the study. Two of three are Baccalaureate nurses working in the continuing education unit of one of the General Hospitals in the State, while the third observer is a secondary school teacher who also holds a Bachelor degree in Social Studies. A technical assistant was also hired to assist the facilitators during the presentations by ensuring that the equipment was well set and coordinated for proper functioning.

#### **8.2.5 Organisation and activities during the workshop**

A two-day workshop was organised for the purpose of pilot testing the training programme. An arrangement was negotiated between the invited participants and the researcher as to the time it would be most convenient for them to attend. The selected days fell on Wednesday and Thursday of the week. The researcher ensured the readiness of all the slides for the power-point presentation a week before the workshop took place. The projector was test run two days before the workshop to ascertain its effectiveness by projecting the learning content on the screen. The chairs and tables were re-arranged in a circular fashion so as to enable group interaction among the members, and ensure a little social distance between the facilitator's seat and that of participants in order to promote familiarity and good interaction and also by making it less formal. The screen for projector was positioned at a point where everybody could see clearly. Adequate ventilation was ensured.

### ***Preparation of facilitators and observers***

The researcher and the other facilitator revised the training activities which included the expectations from both the training team and the participants (school health nurses), and got themselves conversant with lessons from other past training workshops obtained through video clips. Observers were trained by the facilitators about what to look for during the training. An abridged version of Spradley's 9 categories of phenomena for observation (Whitehead, 2005) was used in training them. The phenomena to be observed were as follows:

- Actors in the setting.
- The behaviours that are being carried out by the actors which include acts (smallest units of behaviour), activities (a set of related acts), and events (a set of related events).
- The space occupied by the actors, and how they are positioned in the space.
- The objects in that space and how the objects are placed.
- Time of observation.
- Goals related to the conduct of the actors.
- Emotions or feelings attached to the conduct of the actors.

### **Day One Activities**

On the first day of the workshop, all the six participants arrived early. An exchange of pleasantries took place between the training team and the participants. All the participants took their seats, and were made comfortable. Observers positioned themselves unobtrusively and the technical assistant set the projector in motion.

### ***Content delivery***

The topics were delivered in a logical sequence i.e. the most general and simple were presented first, followed by the more complex and specific topics. The first day witnessed the presentation of topics that included the roles and responsibilities of school health nurses; the

concept of adolescence, reproductive health and adolescent reproductive health, adolescent decision-making. Some of these topics are conceptual in nature, especially adolescent decision-making and adolescence. The presentation/lecture method was used to guide the participants through the topic overviews. In view of the fact that the issues contained therein were topical, the discussion approach was incorporated where necessary so as to enable the participants to share knowledge and experiences. During the discussion period, the facilitator stepped away from the podium and took his seat within close range of the participants. The facilitator encouraged them to debate all the topics presented in order to compare their knowledge practice and experiences from their respective contexts. The facilitator ensured that the discussions were kept on the track by guiding the discussions. Discussions followed immediately after each topic was presented. After the discussions on the second topic, the participants went on a short break with light refreshments for fifteen minutes. Activities resumed when the break time was over. The last two topics were presented as overviews which were interspersed with discussions. Each participant was motivated to contribute fully to the discussions. Participants had their lunch before they departed the venue of the training workshop.

### ***Observation***

Observation of the training activities was done using an abridged version of Spradley's 9 categories of phenomena. The observational activities were diligently carried out by those detailed for the purpose.

### ***Post training meeting***

The post training meeting took place between the facilitators and observers regarding the day's activities after the departure of participants. Issues regarding presentations, discussions, observations, the conduct of the personnel and participants, the equipment and materials, and

the levels of distraction were discussed and reviewed in order to make the activities more trainee-friendly.

### **Day Two Activities**

The second day's activities commenced earlier than that of the previous day. Participants arrived almost at the same time. They settled down immediately after their arrival. The facilitator revised the previous day's learning activities with them and called for their comments and observations.

#### ***Content delivery***

The topics covered on the second day included communication and guidance. These two topics have high skill components. The topic on communication preceded that of guidance. Presentation and discussion approaches were adopted in addressing the sub-topics which included a definition of communication, types of communication, interpersonal communication, processes, and models of communication. The skills component which involved active listening or questioning skills was discussed as well but supplemented with role play. A case-based scenario on communication (establishing a working relationship with adolescents) was created and the participants were asked to act it out. The scenario had to do with how a school health nurse would receive an adolescent into his or her unit and put them at their ease. The second topic was guidance, containing both conceptual and skill aspects. The conceptual aspects which included definition, types, and conceptual perspective were addressed through presentation. The skill component was thoroughly discussed by the participants. A series of role plays were put in place to aid their understanding of how these skills can be applied. Different case-based situations, such as an adolescent seeking guidance about whether to have sex or not with her boyfriend who is supporting her financially, and similar cases like this were used to demonstrate the interpersonal and guidance skills needed

for guiding adolescents through their decision-making about reproductive health, and teaching adolescents about decision-making skills in reproductive health. Role plays took place after each topic had been discussed. In addition, the lessons and ideas generated from role plays were discussed with some guidance from the facilitator.

### ***Observations***

Observers continued with their tasks using an abridged version of Spradley's 9 categories of phenomena as a guide in carrying out observations of activities that took place on the second day.

### ***Post training semi-structured interviews***

In addition to observations, the researcher had an interview with each of the participants to explore what they felt they had gained from the training, and their views and opinions about its organisation, arrangement and suitability of content in meeting the learning objectives. Interviews also focussed on the challenges they experienced before, during, and at the end of the training programme. Each of the interviews lasted about ten minutes. While the respective interviews were going on, observers made some notes regarding their non-verbal cues.

### ***Post training meeting***

The post training meeting took place immediately after the semi-structured interviews were conducted. It involved both the training team and participants, and afforded everyone the opportunity to express their feelings and emotions about the training, the logistics, the welfare and conduct of the training team members and participants. All the comments made were noted and documented as a part of what would be built into the organisation of future workshops on the training programme.

## **Collation of data from facilitators and observers**

Information collected by the three observers and facilitators was gathered together for analysis. The observers' notes constituted the data used for the analysis. The information gathered by the separate observers was compared and the differences were reconciled.

### **8.2.6 Data analysis**

The data collected through the observations, and semi-structured interviews were analysed in order to answer assessment questions relating to compliance to the design standard and the outcome of the programme implementation in respect of its ability to assist school health nurses in the way they guide adolescents in their decision-making about reproductive health.

#### **8.2.6.1 Observations**

Spradley's abridged 9 categories of phenomena (Whitehead, 2005) that might occur in any setting of human interactions, was used to analyse the observed events that took place in the course of implementing the training programme. Each specific category constituted the unit of analysis for the observed phenomena. These categories are as follows: actors in the setting; the behaviours that are being carried out by the actors which include acts (smallest units of behaviour); activities (a set of related acts); and events (a set of related events); the space occupied by the actors, and how they are positioned in the space; the objects in that space, and how the objects are placed, time of observation, goals related to the conduct of the actors and, emotions or feelings attached to the conduct of the actors.

#### ***The actors in the setting***

The facilitators, participants, observers and technical assistant constituted the actors in the setting.



### ***Behaviours that were being carried out by these actors***

The facilitators did the introduction and presentation of the topics after which the topics were discussed by the participants. Facilitators merely guided the discussions and interjected only where clarification was necessary or where their input was needed. Participants did, in the course of presentations, ask questions or retrace their steps to seek further explanation. Participants paid adequate attention. The topics seemed to be interesting to them. They sought for explanations especially on topics such as adolescent decision-making, guidance, communication and the concept of adolescence. Reproductive health was one topic that generated much debate among the participants. Participants engaged in role play after the discussions had taken place. During the role play there were minimal distractions as they were all attentive. Facilitators managed the role play and discussion sessions well. During some presentations, there was an interruption in the power supply, the technical assistant quickly switched on the generator in the premises and distraction was minimal. The technical assistant ensured quick movement of slides when requested during power point presentations and assisted the facilitators with teaching materials. There was little interruption in the training activities from the immediate surroundings. Everybody participated in the break and lunch time activities.

### ***The space occupied by the actors***

The seminar room was well-lit and effectively ventilated. The chairs were arranged in a circular manner with each chair placed against its desk. The facilitator's seat was placed directly in front of the participants. Each observer took her seat at both the right and left extremes not too far from where participants sat. They sat unobtrusively creating an impression of being one of the organisers. Facilitator took turns to occupy the main seat when the occasion demanded. The

technical assistant was seated close to the projector and where audio-visual materials were displayed.

***Objects in that space and how they were situated.***

There are two entry points into the seminar room. There are six ceiling fans. The room has a podium that houses a large table where the teaching materials such as posters and charts were displayed. It has a seating capacity of thirty. There were five columns of six chairs each. The projector screen was placed in the right hand corner in front of the class by the left side of the podium. Projector was placed on one higher table which enabled good focusing.

***Time of observation***

Observations began immediately the participants and the training crew arrived and continued until the end of workshop on the evening of the second day. Observers listened to the side talks by participants during break and lunch time to gauge their feelings about the programme.

***Goals associated with the behaviour of actors.***

The training procedures linked each actor with their expected goals. The facilitators aimed at achieving the goal of transferring the knowledge and skills to the participants. This informed their explanations of concepts and concept elements, and their role during discussions and role-play by the participants. Participants' behaviour was linked to their commitment toward gaining knowledge and skill in respect of how to guide adolescents in their decision-making about reproductive health. This goal stimulated their active participation in all the training activities, while the observers' goal was to observe and document in detail every activity seen within the setting. The technical assistant focused his attention on the smooth operation of the computer and projector, and the proper functioning of other materials during the presentations.

### ***How the behaviours were carried out***

Behaviours occurred naturally and were seen as products of interactive activities stemming from the implementation of the training programme. All the actors were objective in their interactions regarding the programme activities. Their contributions during the discussions followed the patterns arising from the nature of the issues debated.

### **Discussion of observations**

Findings from observations were used to answer questions relating to the replicability, simplicity and practicability of the training programme (Fawcett et al. 2013: 37). All the actors' activities followed the expected directions as every actor played his or her role within the confines of workshop protocols. The keen conduct of participants may be attributed to their readiness and interest in learning about adolescent reproductive health as demonstrated by the high level of their commitment toward issues and content scheduled for learning. The facilitators' conduct during the training workshop was borne out of their commitment to achieving the objectives of the intervention programme. The observers' performance in recording the events accurately suggests the effectiveness of lessons from the pre-workshop training which they had during which they were guided through the process of tailoring their observations, and making proper documentation of the observed phenomena. The results of observations further underscore the success in the activities of all actors during the training workshop. A well-organised workshop has a high likelihood of producing a positive outcome in terms of what the learner will gain. In a study on asthma education for school health nurses, the workshop sessions were rated by the participants as the best part of the workshop (Winkelstein et al. 2006: 136). From the foregoing, the training programme can be repeated by an individual or a group of individuals for school health nurses elsewhere. Its simplicity was borne out of the fact that the topics were treated, discussed and explained in a lucid manner.

The use of discussions to ensure clarification and application of acquired skills made the training programme practically inclined.

#### **8.2.6.2 Semi-structured interviews**

Data collected through semi-structured interviews was analysed using the inductive content analysis approach by coding the data in order to generate categories from which themes emerged. The interview covered issues such as the content of the training programme, its organisation, the environment where the training programme took place and, what they gained from it. The interview took place immediately after the training workshop was rounded off. The following themes, and the statements underscoring the themes, are presented as follows:

- ***Satisfaction with programme content***

Participants expressed their satisfaction with the programme content. They were appreciative of the way the training workshop was packaged and delivered to them. This was made manifest by their statements:

*“It is very interesting because I learnt a lot of things that I did not know before.” P2*

*“It is very interesting, I really like it!” P2*

*“... and it is very appropriate and very interesting.” P2*

*“The topics were interesting and they would have a lot of impact on us.” P5*

*“Very educative, and pleasant for me.” P4*

*“...workshop is nice, encouraging and educative.” P6*

- ***Gaining skills needed for guiding adolescents***

The focus of the training programme implementation for the school health nurses was to assist them in acquiring the skills needed to guide adolescents in their decision-making about reproductive health. This theme underscores the effectiveness of the training programme. The programme helped them in acquiring the skills as noted in their statements:

*“...the way the adolescents behave when they reach puberty, we did not really know how to deal with them, the little we have on our own, and we just advise them. The one you taught us, I know we have enough from that and the skills will help us. I know this knowledge will help me in my practice.” P2*

*“I appreciate the use of communication better now, especially one-on-one communication.” P2*

*“...One of the skills I cherish is how best to derive information from adolescents, and how best to give them advice, to control them, and ensuring they make best choices.” P5*

*“We will just ask questions without trying to probe adolescents further. We attend to them based on the statements they make.” P5*

*“...We learnt that it is not everything you force students to do.” P1*

*“Person to person contacts, you and your patient or student or school staff in the area of interpersonal behaviour and good rapport.” P1*

*“... It taught me on how to be patient and listen to them (adolescents).” P4*

*“I found the lecture on skills for guiding adolescents very interesting.” P6*

*“I think I can now talk to teachers and principals in a better way.” P5*

▪ ***Readiness to apply skills in the practice area***

The essence of this training programme was to effect a change in behaviour from their usual way of guiding adolescents, to a new one after the intervention. Some of the school health nurses expressed their willingness to start applying the newly gained skills from the training programme to their respective practice areas:

*“...I will start applying the knowledge and skills.” P2*

*“I will be employing the skills to assist adolescents.” P3*

▪ ***Gaining more knowledge of the content***

Besides understanding the use of skills for guiding adolescents in their decision-making about reproductive health, the participants also gained more knowledge of the topics they were taught. School health nurses will not be able to perform this essential role if they are bereft of the adequate knowledge of their role; the concepts and issues that relate to decision-making,

adolescent reproductive health, communication or, guidance. Knowledge of those concepts was found in the statements made by the participants:

*“Training gave me the avenue to correct so many anomalies that have been going on before.”*

P5

*“I gained the knowledge and skills that we needed to work with adolescents.”* P3

*“The training broadened our knowledge about our expectations.”* P1

*“...and government should have provided us with this kind of knowledge.”* P6

- ***Effectiveness of teaching methods***

Teaching methods are an integral part of a training programme design, and also determine how the content of a training programme will be delivered. Success of a training workshop has some relationship with effective training methods. This view was expressed by some of the participants after the training:

*“The explanation and discussion made me learn a lot.”* P4

*“The role-plays helped me to have deep knowledge about decision-making of adolescents.”* P6

- ***Conducive learning environment***

Participants in their various responses indicated that they found the learning setting quite conducive to learning. The statements underscoring this theme were captured during the interview. The setting was the venue of the training workshop where series of training activities took place:

*“Concerning organisation, the venue was conducive except occasional power outage.”* P3

*“The setting was good.”* P1

*“Organisation was okay.”* P4

*“The environment for the training was okay for us.”* P6

- ***The need for continued training of school health nurses***

Participants expressed their feelings about sustaining this type of training for school health nurses in this crucial area. This was contained in their comments during the interview:

*“...This kind of training should be a continuous one so as to update our skills in adolescent reproductive health.” P3*

*“I would have loved it if government were present to take note of the comments that came up during the workshop.” P5*

*“...and this kind of seminar should be coming up to widen our knowledge.” P1*

### **Discussions of semi-structured interview results**

Findings from the data analysis show participants' satisfaction with the programme content and with the organisation of the workshop. The success of a training programme is a function of multiple factors which include preparation and understanding of the content by the facilitators and effectiveness of training strategies (Goto et al. 2014: 150). The nurses' satisfaction with the skills and knowledge they acquired is a reflection of the fact that they found the programme useful, and compatible with their values across contexts. The training of health professionals that will guide adolescents in their reproductive health remains one of the programme components of adolescent reproductive health (International Conference on Population Development, 1994). They revealed that they were able to acquire skills that will be needed for guiding adolescents in their decision-making about reproductive health. In addition, some expressed their readiness to apply the skills in their practice areas, and felt that this would constitute the basis for action that would lead to positive change. School health nurses who have access to skill-based training appear to be better equipped to perform their role, and are able to cope with challenges arising from them (Vought-O'Sullivan, 2006: 1). The results also reveal that the participants gained greater confidence in communicating with teachers in the school environment as this will enable them negotiate resources such as space and materials that will aid them in the provision of guidance for adolescents in their decision-making on reproductive health. This confidence stems from the new knowledge and skills they have acquired, especially interpersonal and communication skills, during the workshop. A well-structured intervention programme should be able to help participants with problem-

solving (Houghton, 2003: 24). Of particular interest was their request that this kind of workshop be mounted on a regular basis. Even though this is beyond the scope of this study, it is a critical means of sustaining the gains they have made during the workshop. It has been suggested that public health workforce, of which school health nurses are part, should be given lifelong training in order to keep them abreast of new developments in respect of knowledge and skills needed to function optimally in their respective areas of endeavour (Institute of Medicine in Kenefick et al, 2014: 488).

### **8.3 SUMMARY**

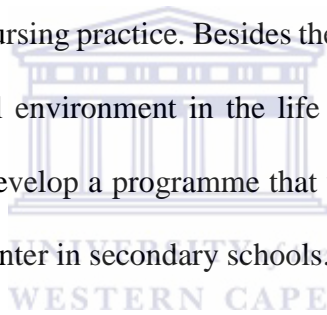
This chapter focused on the pilot test which is an activity found in phase four of the Intervention Design and Development model of Rothman and Thomas (2013). It was used to address the sixth objective which is: to implement the intervention programme developed for school health nurses toward assisting them with guiding adolescents in their decision-making about reproductive health. A 9-step programme process model was employed in effecting both the formative and summative assessment. Observation and semi-structured interviews were the data collection methods. The observations were analysed with Spradley's model while semi-structured interviews were analysed using inductive content analysis approach. Discussions of the results were done to answer pertinent questions relating to the pilot testing of the programme.



## **CHAPTER NINE: SUMMARY, LIMITATION, RECOMMENDATION AND CONCLUSION**

### **9.1 INTRODUCTION**

The summary, limitation, recommendation and conclusion of the study are presented in this chapter. The research was about enhancing the performance of school health nurses in their ability to guide adolescents in their decision-making about reproductive health in the school environment. The morbidity and mortality rates of adolescents arising from their poor decision-making in reproductive health place a high burden on school health nurses as school health nurses are expected to assist in curtailing those rates through their professional efforts and inputs. Literature has shown that school health nurses were not performing this essential role thereby creating a gap in school nursing practice. Besides the family, the school has been found to be the second most influential environment in the life of an adolescent. The researcher, therefore, found it expedient to develop a programme that will help their performance in this role to the adolescents they encounter in secondary schools.



#### **9.1.1 Aim of the study**

The goal of the study was to develop an intervention programme toward assisting school health nurses on guiding adolescents in their decision-making on reproductive health in the Ijebu Ode Local Government Area of Nigeria.

#### **9.1.2 Objectives of the study**

- 1) To explore the role of school health nurses in the school environment of Ijebu Ode Local Government Area of Nigeria
- 2) To explore school health nurses' understanding of how adolescents make their decisions about reproductive health in the school health environment of the Ijebu-Ode Local Government Area

- 3) To explore the experiences of school health nurses with regard to guiding adolescents in their decision-making about reproductive health in the school environment of the Ijebu Ode Local Government Area of Nigeria.
- 4) To explore the factors that affect school health nurses in guiding adolescents' decision-making on reproductive health in the school environment of the Ijebu Ode Local Government Area of Nigeria.
- 5) To develop an appropriate intervention program for school health nurses for guiding adolescents in decision-making about reproductive health in the school health environment of the Ijebu Ode Local Government Area of Nigeria.
- 6) To implement the intervention programme for school health nurses on guiding adolescents in decision-making in Ijebu Ode Local Government Area through pilot testing.

## **9.2 SUMMARY OF KEY FINDINGS**

The key findings of this study were summarised along the phases of Rothman and Thomas's Intervention Design and Development research design.

### **9.2.1 Problem analysis and project planning**

This is the stage where data were collected in order to define and situate the problem. A qualitative research approach was incorporated into the design of the study. Semi-structured interviews and focus group discussions were the methods used to collect the data from the identified participants. These were school health nurses, school adolescents, school teachers, and the school health coordinator. An interview guide was developed to direct the questions during the interview. Data collected was analysed by using inductive content analysis. Findings from the data analysis were presented and discussed, and these showed that school health nurses lacked the adequate knowledge of their role in the school environment. The findings further revealed that they have inadequate knowledge of the process of adolescent decision-

making in reproductive health. It was also found that school health nurses lacked the requisite knowledge and skills needed to provide adequate guidance to school adolescents in their decision-making about reproductive health. These findings suggested that there is a gap in the knowledge and skills needed by school health nurses to provide guidance to adolescents in their decision-making about reproductive health.

### **9.2.2 Information gathering and synthesis**

Having determined the need to develop an intervention programme, the researcher proceeded to discover various kinds of existing programmes that have been developed for school health nurses to enhance their practice, especially in the areas of guiding adolescents in decision-making on reproductive health. Based on the extensive search results, there were no intervention programmes specifically developed for school health nurses in the research area. However, there were a few other areas of school nursing practice where intervention programmes were developed in order to assist school health nurses in their role performance. The researcher performed an integrative review of these programmes, and the data extracted were analysed to answer the review and sub-review questions which were aimed at discovering what worked and what did not work, their elements, methods of instruction indicated in those programmes, and what could be adapted to the intervention programme that would help school health nurses guide adolescents in their decision-making about reproductive health.

### **9.2.3 Design**

Findings from both phases one and two of the intervention design and development model were merged in order to design this intervention programme. The design entailed how the intervention programme would be assessed i.e. the expectations of the programme in terms of outcome, and the process which consisted of the instructional methods, delivery formats and learning strategies. The design also included the content which was indexed by the topics and sub-topics, and the skills that school health nurses needed to learn.

#### **9.2.4 Development and pilot testing**

This was the phase where the transition of the designed programme to its development took place. The training contents were crafted in modules. Six modules were created. Training methods were also indicated. The activities that were expected during training were specified within the programme. The topics covered the knowledge and skills needed by school health nurses so as to be able to effectively guide adolescents in their decision-making about reproductive health. The training programme was pilot tested through a training workshop. School health nurses constituted the participants for the workshop. Training was conducted. The process and outcome of the programme implementation was assessed using observation methods, and semi-structured interviews. Findings from the analysis of the data collected show that participants were satisfied with the training workshop indicating the adequacy of the programme content and accuracy with which the training was delivered. They also indicated that they gained greater knowledge on these topics and acquired skills relating to the guidance of adolescents. They further indicated that the training workshop should be made available to them in order to enhance their performance, and they expressed their readiness to apply the knowledge and skills gained in their respective practice areas.

#### **9.3 LIMITATIONS**

The study was restricted to one local government area, and the number of participants used for collection of data for problem analysis and project planning was low thereby compromising its transferability. Transferability entails applicability of the qualitative findings to other situations. This is not as possible due to the fact that sample size was not representative of the study population. The study design provided a platform for this since the main target of qualitative research strategies is to provide a rich understanding of issues and problems surrounding individuals. The study was equally fraught with limited time and financial resources as it was intended for a PhD programme.

## **9.4 RECOMMENDATIONS**

The emergent recommendation is multi-dimensional as it concerns different stakeholders who are committed to ensuring positive adolescent reproductive health outcomes.

### **9.4.1 Governmental and non-governmental support**

The training programme has yet to be evaluated as this can only take place in phase five of the Intervention Design and Development. The various tiers of government, research agencies or non-governmental organisations working in the direction of adolescent reproductive health should provide support for its full evaluation and subsequent adoption for use.

### **9.4.2 Nursing education**

The findings of this study should provide a focus for nurse educators toward examining the gap in the nursing curricula in general, and public health nursing curricula in particular, in respect of school health nursing as this will help to adequately address other areas of concern.

### **9.4.3 School nursing practice**

School health nurses should use the findings of this study to reposition themselves for better performance in respect of the guidance they offer adolescents in their decision-making about reproductive health. Knowledge and skills will further enhance their professional status within the school environment. Regular training should be provided for school health nurses toward updating their knowledge on guidance of adolescents in their decision-making about reproductive health.

### **9.4.4 Nursing organisations**

The various nursing organisations, especially school nursing organisations, should encourage the use of this training programme by their members as a means of: orienting the newly employed school health nurses who may not have specialist knowledge or be familiar with his

or her role expectations in the school environment, and updating the knowledge of those that are already in practice with respect to their role expectations by adolescents.

#### **9.4.5 Nursing research**

Nursing researchers are encouraged to identify gaps in this study and conduct more research in these areas or embark on similar studies which could further help school health nurses in performing their role in school environment effectively. Guidance is an adaptive role rather than a formalized one. Nursing researchers are encouraged to identify other adaptive roles of school health nurses and even identify proactive ones, which are yet to be explored, in order to assist them in performing such roles especially in the area of adolescents' reproductive health and their guidance in decision-making.

### **9.5 CONCLUSION**

School nursing practice could be enhanced if school health nurses understand and perform their roles as expected. Their role should move beyond formalized to include an adaptive role such as guiding adolescents in decision-making about reproductive health, and a proactive role which is futuristic. The findings of this study have demonstrated that school health nurses lacked the necessary knowledge and skills required for guiding adolescents which justified the development of an intervention programme. The evidence from the outcome of the training programme implementation shows that school health nurses benefitted tremendously since their knowledge of issues surrounding adolescent decision-making in reproductive health, and their interpersonal and communication skills, which are necessary for guidance, became enhanced after the training programme.

## REFERENCES

- Abd-El-Aziz, H.M., Ibrahim, N.K., Aki, O.A. & Ibrahim, H.K. 2009, "Impact of health education intervention program about breast cancer among in a semi-urban area in Alexandria, Egypt", *Journal of the Egyptian Public Health Association*, vol. 84. No. 2. Pp. 219-243.
- Abdu-Raheem, B. 2012, "Effects Of Problem-Solving Method On Secondary School Students' Achievement And Retention In Social Studies, In Ekiti State, Nigeria", *Journal of International Education Research*, vol. 8, no. 1, pp. 19.
- Abell, N. & Wolf, D. 2003, "Implementing intervention research in doctoral education: Maximizing opportunities in training for outcome evaluation", *Journal of Teaching in Social Work*, vol. 23, no. 1-2, pp. 3-19.
- Abrams, L.S. 2010, "Sampling 'Hard to reach populations in qualitative Research: The Case of Incarcerated Youth", *Qualitative Social Work*, vol. 9, no. 4, pp. 536-550.
- Adamczyk, A. & Hayes, B.E. 2012, "Religion and Sexual Behaviors Understanding the Influence of Islamic Cultures and Religious Affiliation for Explaining Sex Outside of Marriage", *American Sociological Review*, vol. 77, no. 5, pp. 723-746.
- Adelson, J. & Doehrman, M.J. 1980, "The psychodynamic approach to adolescence", *Handbook of adolescent psychology*, pp. 99-116.
- Ademokun, O.M., Osungbade, K.O. & Obembe, T.A. 2014, "A Qualitative Study on Status of Implementation of School Health Programme in South Western Nigeria: Implications for Healthy Living of School Age Children in Developing Countries", *American Journal of Educational Research*, vol. 2, no. 11, pp.1076-1087.
- Adeyemo, D. 2005, "Local government and health care delivery in Nigeria: a case study", *J.Hum.Ecol*, vol. 18, no. 2, pp. 149-160.
- Ahmed, A.D. 2012, "Adolescent: Sudan", In J.J Arnett, ed., *Adolescent psychology around the world*. Sussex. Psychology Press. pp. 73-83.
- Aigbiremolen, A. O., Alenoghena, I., Eboreime, E., & Abejegah, C. 2014, "Primary health care in Nigeria: From conceptualization to implementation" *Journal of Medical and Applied Biosciences*, vol. 6, no. 2, pp. 35-43.
- Akande, T. 2004, "Referral system in Nigeria: Study of a tertiary health facility".
- Akpabio, I.I. 2010, "Problems and challenges of school health nursing in Akwa Ibom and Cross River States, Nigeria", *Continental J. Nursing Science* 2: 17-28, <http://www.wiloludjournal.com>
- Akpabio, I.I., Asuzu, M.C., Fajemilehin, B.R. & Ofi, A.B. 2009, "Effects of school health nursing education interventions on HIV/AIDS-related attitudes of students in Akwa Ibom State, Nigeria", *Journal of Adolescent Health*, vol. 44, no. 2, pp. 118-123.
- Albert, D., Chein, J. & Steinberg, L. 2013, "The teenage brain peer influences on adolescent decision making", *Current Directions in Psychological Science*, vol. 22, no. 2, pp. 114-120.

Alexandropoulou, M., Sourtzi, P. & Kalokerinou, A. 2010, "Health promotion practices and attitudes among nurses in special education schools in Greece", *The Journal of School Nursing*, vol. 26, no. 4, pp. 278-288.

Ali, P.A., Watson, R. & Albutt, G. 2011, "Are English novice nurses prepared to work in primary care setting?", *Nurse Education in Practice*, vol. 11, no. 5, pp. 304-308.

Animasaun, V.J., Oduwole, A.O. & Aryeety, D.N.D. 2014, "Sexual risk-taking among in-school adolescent females in Ogun State. Available at <http://www.africalsexuality.org/>. [Accessed 4 April 2014]

Armstrong, M. 1996, *A handbook of personnel management practice*, Kogan Page.

Arube-Wani, J., Jitta, J. & Ssenooba, L.M. 2008, "10. Adolescent-Friendly Health Services in Uganda" *Promoting adolescent sexual and reproductive health in east and southern Africa*, pp. 214.

Atieno, O. 2009, "An analysis of the strengths and limitation of qualitative and quantitative research paradigms", *Problems of Education in the 21st Century*, vol. 13, no. 1, pp. 13-38.

Atkinson, R.L., Atkinson, R.C., Smith, E.E. & Daryl, J. 1996, *Introduction to psychology*. Wallingford: Wardsworth Publishing Co Inc.

Auerbach, C. & Silverstein, L.B. 2003, *Qualitative data: An introduction to coding and analysis*, NYU press.

Ayres, L. 2008, "Semi-structured interview", *The SAGE encyclopedia of qualitative research methods*, pp. 811-813.

Babalola, D.O. 2012, "Rural Urban Transformations in the Developing Countries", *Journal of Sustainable Development and Environmental Protection*, vol. 2, no. 3, pp. 83-111.

Baker, S.E. & Edwards, R. 2012, "How many qualitative interviews is enough",

Banfield, M., McGorm, K. & Sargent, G. 2015, "Health promotion in schools: a multi-method evaluation of an Australian School Youth Health Nurse Program", *BMC Nursing*, vol. 14, no. 1, pp. 1.

Banks, P., Roxburgh, M., Kane, H., Lauder, W., Jones, M., Kydd, A. & Atkinson, J. 2011, "Flying Start NHS™: easing the transition from student to registered health professional", *Journal of Clinical Nursing*, vol. 20, no. 23-24, pp. 3567-3576.

Banta, T.W. 1996, "Editor's notes: Faculty involvement in assessment: Why is it so hard to achieve?" *Assessment Update*, vol. 8, no. 5, pp. 3-15.

Barker, C., Pistrang, N. & Elliott, R. 2005, "Self-Report Methods", *Research Methods in Clinical Psychology: An Introduction for Students and Practitioners, Second Edition*, pp. 94-118.

Barr, S. 2011, "Employee orientation programs: The benefits of having a solid employee orientation program for your municipal employees. A research paper



- Barrett, T., Shaida, N. & Shaw, A. 2010, *Radiology for undergraduate finals and foundation years: Key topics and question types*. Radcliffe Publishing.
- Barrett, E.A. 2002, "What is nursing science?" *Nursing Science Quarterly*, vol. 15, no. 1, pp. 51-60.
- Baumeister, R.F. & Twenge, J.M. 2002, "Cultural suppression of female sexuality", *Review of General Psychology*, vol. 6, no. 2, pp. 166.
- Bearinger, L.H., Sieving, R.E., Ferguson, J. & Sharma, V. 2007, "Global perspectives on the sexual and reproductive health of adolescents: patterns, prevention, and potential" *The Lancet*, vol. 369, no. 9568, pp. 1220-1231.
- Beck, C.T. 2001, "Predictors of postpartum depression: an update", *Nursing Research*, vol. 50, no. 5, pp. 275-285.
- Becker, J.B., Monteggia, L.M., Perrot-Sinal, T.S., Romeo, R.D., Taylor, J.R., Yehuda, R. & Bale, T.L. 2007, "Stress and disease: is being female a predisposing factor?", *The Journal of Neuroscience*, vol. 27, no. 44, pp. 11851-11855.
- Berger, K.S. 2005, "The developing person through the life span". New York: Worth Publishers
- Bernstein, D.A., Clarke-Stewart, A., Roy, E.J. & Wickens, C.D. 1997, "Psychology". Boston: Houghton Mifflin.
- Berry, R.S. 1999, "Collecting data by in-depth interviewing",
- Beyth-Marom, R. & Fischhoff, B. 1997, "Adolescents' decisions about risks: A Cognitive Perspective" In J Schulenberg, J L Maggs & K Hurrelmann, eds., *Health risks and developmental transitions during adolescence*, pp. 110-135. Cambridge: Cambridge University Press.
- Bhattacharyya, G. 2002, "Sexuality and society: An introduction", Psychology Press.
- Bimerew, M.S. 2013, "Developing a framework for a district-based information management system for mental health care in the Western Cape",
- Birdthistle, I. & Vince-Whitman, C. 1997, *Reproductive health programs for young adults: School-based programs*, Pathfinder International, Focus on Young Adults Project.
- Blakemore, S. & Robbins, T.W. 2012, "Decision-making in the adolescent brain", *Nature Neuroscience*, vol. 15, no. 9, pp. 1184-1191.
- Boden, M.A. 1998, "Creativity and artificial intelligence", *Artificial Intelligence*, vol. 103, no. 1, pp. 347-356.
- Boonstra, H.D. 2015, "Meeting the sexual and reproductive health needs of adolescents in school-based health centers", *Guttmacher Policy Review*, vol. 18, no. 1, pp. 21-26.
- Boote, D.N. & Beile, P. 2005, "Scholars before researchers: On the centrality of the dissertation literature review in research preparation", *Educational Researcher*, vol. 34, no. 6, pp. 3-15.

- Borawski, E.A., Tufts, K.A., Trapl, E.S., Hayman, L.L., Yoder, L.D. & Lovegreen, L.D. 2015, "Effectiveness of health education teachers and school nurses teaching sexually transmitted infections/human immunodeficiency virus prevention knowledge and skills in high school", *Journal of School Health*, vol. 85, no. 3, pp. 189-196.
- Borgen, W.A. 2002, "Youth counselling and career guidance: What adolescents are telling us", *Secondary Education for a Better Future Conference: Muscat, Oman*.
- Bowen, G.A. 2008, "Naturalistic inquiry and the saturation concept: a research note", *Qualitative Research*, vol. 8, no. 1, pp. 137-152.
- British Columbia Pharmacy Association, 2013, "Clinical services proposal—treatment of minor ailments". Avail-able: [www.bcpharmacy.ca/uploads/Treatment\\_of\\_Minor\\_Ailments.pdf](http://www.bcpharmacy.ca/uploads/Treatment_of_Minor_Ailments.pdf) (accessed July 26, 2013).
- Broussard, L. 2004, "School Nursing: Not Just Band-Aids Any More!" *Journal for Specialists in Pediatric Nursing*, vol. 9, no. 3, pp. 77-83.
- Brown, A.P. 2010, "Qualitative method and compromise in applied social research", *Qualitative Research*, vol. 10, no. 2, pp. 229-248.
- Brown, G. & Wilson, C. 2005, "The family, health and caring", *Sociology for Nurses*, pp. 181.
- Bryman, A. & Cassell, C. 2006, "The researcher interview: a reflexive perspective", *Qualitative Research in Organizations and Management*, vol. 1, no. 1, pp. 41-55.
- Buckley, S., McDonald, J., Mason, D., Gerring, Z., Churchward, M. & Cumming, J. 2009, "Nursing services in New Zealand secondary schools", *Health Services Research Centre, School of Government, Victoria University of Wellington*. Available at: [http://www.victoria.ac.nz/hsrc/reports/downloads/Nursing%](http://www.victoria.ac.nz/hsrc/reports/downloads/Nursing%20), vol. 20.
- Buckley, S., Gerring, Z., Cumming, J., Mason, D., McDonald, J. & Churchward, M. 2012, "School nursing in New Zealand: a study of services", *Policy, Politics & Nursing Practice*, vol. 13, no. 1, pp. 45-53.
- Burnard, P. 1989, *Teaching interpersonal skills*, Suffolk. St Edmundsbury Press. Pg. 100
- Burnard, P. 2013, *Acquiring Interpersonal Skills: A handbook of experiential learning for health professionals*. Springer.
- Burns, N. & Grove, S.K. 2003, "Understanding Nursing Research",
- Campbell, J.P. 1990, "The role of theory in industrial and organizational psychology".
- Campbell, T.B. 2009, "Role socialization: designing a web-based program to orient new school nurses", *The Journal of School Nursing*, vol. 25, no. 2, pp. 117-125.
- Carey, N., Stenner, K. & Courtenay, M. 2014, "An exploration of how nurse prescribing is being used for patients with respiratory conditions across the east of England", *BMC Health Services Research*, vol. 14, no. 1, pp. 1.
- Carter, S.M. & Little, M. 2007, "Justifying knowledge, justifying method, taking action: epistemologies, methodologies, and methods in qualitative research", *Qualitative Health Research*, vol. 17, no. 10, pp. 1316-1328.

Cartwright, R. 2003, *Implementing a Training and Development Strategy: Training and Development 11.8*, John Wiley & Sons.

Centre for Disease Control and Prevention. 2008, "Data collection methods for program evaluation: Observation" *Centre for Disease Control and Prevention*.

Centre for Reproductive Rights. 2006, "Gaining ground: A tool for advancing reproductive rights law reform; adolescent reproductive rights", *Centre for Reproductive Rights*

Chandler, T., Qureshi, K., Gebbie, K.M. & Morse, S.S. 2008, "Teaching emergency preparedness to public health workers: use of blended learning in web-based training", *Public Health Reports*, pp. 676-680.

Chaudhary, N. & Sharma, N. 2012, "Adolescent: India", In J.J Arnett, ed., *Adolescent psychology around the world*. Sussex. Psychology Press. pp. 103-118.

Chilton, J.M., Haas, B.K. & Gosselin, K.P. 2014, "The effect of a wellness program on adolescent females", *Western Journal of Nursing Research*, vol. 36, no. 5, pp. 581-598.

Clamp, C., Gough, S. & Land, L. 2005, *Resources for nursing research: An annotated bibliography*, Sage.

Comer, E., Meier, A. & Galinsky, M.J. 2004, "Development of innovative group work practice using the intervention research paradigm", *Social Work*, vol. 49, no. 2, pp. 250-260.

Constitution, N. 1999, "Constitution of the Federal Republic of Nigeria", *Abuja, Federal Ministry of Information and National Orientation*.

Cooper, H. 1989, "Synthesis of research on homework", *Educational Leadership*, vol. 47, no.3, pp. 85-91.

Cooper, H.M. 1998, *Synthesizing research: A guide for literature reviews*, Sage.

Council, B.Y. 2011, "Our school nurse: Young people's views on the role of the school nurse", United Kingdom.

Coyle-Shapiro, J., Hoque, K., Kessler, L., Pepper, A., Richardson, R. & Walker, L. 2013, "Human resource management: Undergraduate study in economics, management, finance and the social sciences". London: University of London

Craig, G.J. & Dunn, W.L. 2010, *Understanding human development*, Pearson Education/Prentice Hall.

Creating Resources for Empowerment Action. 2015, "Adolescents' sexual and reproductive health and rights in India", pg. 7. New Delhi: CREA

Creswell, J. 2009, *Research design: Qualitative, quantitative, and mixed methods approaches* SAGE Publications, Incorporated.

Creswell, J.W. 2012, *Qualitative inquiry and research design: Choosing among five approaches*, Sage.

- Crossetti, Maria da Graça Oliveira 2012, "Integrative review of nursing research: scientific rigor required", *Revista Gaúcha de Enfermagem*, vol. 33, no. 2, pp. 12-13.
- Daft, R.L. 1999, *Leadership: Theory and practice*, Harcourt College Pub.
- Dawson, C. 2009, *Introduction to research methods: A practical guide for anyone undertaking a research project*, Hachette UK.
- De Jong, T. & Ferguson-Hessler, M.G. 1996, "Types and qualities of knowledge", *Educational Psychologist*, vol. 31, no. 2, pp. 105-113.
- Denehy, J. 2007, "Educational preparation for school nurses", *The Journal of School Nursing*, vol. 23, no. 4, pp. 191-192.
- Denny, S., Robinson, E., Lawler, C., Bagshaw, S., Farrant, B., Bell, F., Dawson, D., Nicholson, D., Hart, M. & Fleming, T. 2012, "Association between availability and quality of health services in schools and reproductive health outcomes among students: a multilevel observational study", *American Journal of Public Health*, vol. 102, no. 10, pp. e14-e20.
- DeSocio, J., Elder, L. & Puckett, S. 2008, "Bridging cultures for Latino children: School nurse and advanced practice nurse partnerships", *Journal of Child and Adolescent Psychiatric Nursing*, vol. 21, no. 3, pp. 146-153.
- Development of Policy-Oriented Training Programmes in the Context of the European Integration. 2013, "Best practices in training". *Report*.
- Dey, I. 2005, "Qualitative data analysis" *A user friendly guide for social scientists*. London: Routledge
- DiCicco-Bloom, B., & Crabtree, B.F. 2006, "The qualitative research interview", *Medical Education*, no 40. pp. 314-321.
- Ducharme, F., Beaudet, L., Legault, A., Kergoat, M.J., Levesque, L. & Caron, C. 2009, "Development of an intervention program for Alzheimer's family caregivers following diagnostic disclosure", *Clinical Nursing Research*, vol. 18, no. 1, pp. 44-67.
- Dunn, W.L. 2011 & Craig, G. J. 2013, *Understanding human development*, Upper Saddle River, NJ: Person Education.
- El Aziz, Hanan M Abd, Akl, O.A. & Ibrahim, H.K. 2009, "Impact of a health education intervention program about breast cancer among women in a semi-urban area in Alexandria, Egypt", *J Egypt Public Health Assoc*, vol. 84, no. 1-2, pp. 219-243.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K. & Kyngäs, H. 2014, "Qualitative content analysis", *SAGE open*, vol. 4, no. 1, pp. 2158244014522633.
- Emanuel, L., Ferris, F., Von Gunten, C. & Von Roenn, J. 2002, "EPEC", Education for Physicians on End-of-Life Care. *The American Journal of Hospice & Palliative care*, vol. 19, no. 1, pp. 17.
- Endacott, R. 2007, "Clinical research 2: legal and ethical issues in research", *Accident and Emergency Nursing*, vol. 15, no. 3, pp. 166-169.

- Eseré, M.O. 2008, "Effect of Sex Education Programme on at-risk sexual behaviour of school-going adolescents in Ilorin, Nigeria." *African Health Sciences*, vol. 8, no. 2.
- Eskandari, M., Abbaszadeh, A. & Borhani, F. 2013, "Barriers of referral system to health care provision in rural societies in Iran", *Journal of Caring Sciences*, vol. 2, no. 3, pp. 229-236.
- Etim, J.S. 2013, "Education in the middle years/junior secondary School in USA and Nigeria: A Comparative Analysis", *Journal of Sustainable Development in Africa*, vol. 16, no. 2, pp. 1520-5509.
- Fairweather, G.W. 1967, "Methods for experimental social innovation."
- Fantasia, H.C. 2008, "Concept Analysis: Sexual Decision-Making in Adolescence", *Nursing Forum*. Wiley Online Library, pp. 80.
- Farrag, S. & Hayter, M. 2014, "A qualitative study of Egyptian school nurses' attitudes and experiences toward sex and relationship education", *The Journal of School Nursing*, vol. 30, no. 1, pp. 49-56.
- Fatusi, A.O. & Hindin, M.J. 2010, "Adolescents and youth in developing countries: Health and development issues in context", *Journal of Adolescence*, vol. 33, no. 4, pp. 499-508.
- Fawcett, J. 2000, *Analysis and evaluation of contemporary nursing knowledge: Nursing models and theories*, FA Davis.
- Fawcett, S.B. 1991, "Some values guiding community research and action", *Journal of Applied Behavior Analysis*, vol. 24, no. 4, pp. 621-636.
- Fawcett, S.B., Suarez-Balcazar, Y., Balcazar, F.E., White, G.W., Paine, A.L., Blanchard, K.A. & Embree, M. G. 2013, "Conducting intervention research-the design and development process", *Intervention research: Design and development for human service*. pp. 25-54.
- Federal Ministry of Education. 2004, "Nigeria Policy Brief: Teachers for the future, meeting teacher shortages to achieve education for all", *Federal Ministry of Education*, Abuja.
- Federal Ministry of Education. 2006a, "The national school health policy" *Federal Ministry of Education*, Abuja
- Federal Ministry of Education. 2006b, "Implementation guidelines on national school health policy" *Federal Ministry of Education*, Abuja
- Federal Ministry of Health. 2007, "National policy on the health and development of adolescents and young people in Nigeria", *Federal Ministry of Health*, Abuja.
- Federal Ministry of Information. 1999, "Nigerian Constitution", *Federal Ministry of Information*.
- Felton, J.S. & Keil, C.P. 1998, "School nursing: a study of perceptions and visions", *The Journal of School Nursing*, vol. 14, no. 3, pp. 5-13.
- Fenwick, T. & Tennant, M. 2004, "Understanding adult learners", *Dimensions of adult learning: Adult education and training in a global era*. pp. 55-73.

- Fink, L.D. 2013, "Creating significant learning experiences: *An integrated approach to designing college courses*", John Wiley & Sons.
- Finn, D. 2011, "Principles of adult learning: An ESL context", *Journal of Adult Education*, vol. 40, no. 1, pp. 34.
- Fraser, M.W. & Galinsky, M.J. 2010, "Steps in intervention research: Designing and developing social programs", *Research on Social Work Practice*.
- Fraser, M.W., Richman, J.M., Galinsky, M.J. & Day, and S.H. 2009, *Intervention research: Developing social programs*. Oxford University Press.
- Freyder, P. & O'Toole, T. 2000, "Principle 2: The relationship between partners is characterized by mutual trust, respect, genuineness and commitment", *Partnership Perspectives*, vol. 2, pp. 192-5.
- Gabzdyl, E.M. 2010, "Contraceptive care of adolescents: overview, tips, strategies, and implications for school nurses", *The Journal of School Nursing*, vol. 26, no. 4, pp. 267-277.
- Gage, A.J. 1998, "Sexual activity and contraceptive use: the components of the decision making process", *Studies in Family Planning*, pp. 154-166.
- Gaiser, T.J. & Schreiner, A.E. 2009, "A guide to conducting online research", Sage Publications.
- Ganyaza-Twalo, T. 2010, *Guidelines for the development of an HIV/AIDS workplace support programme for teachers*,
- Garcia, F. & Gracia, E. 2009, "Is always authoritative the optimum parenting style? Evidence from Spanish families", *Adolescence*, vol. 44, no. 173, pp. 101.
- Gerrard, M., Gibbons, F.X., Houlihan, A.E., Stock, M.L. & Pomery, E.A. 2008, "A dual-process approach to health risk decision making: The prototype willingness model", *Developmental Review*, vol. 28, no. 1, pp. 29-61.
- Ghirardini, B. 2011, "E-learning methodologies: a guide for designing and developing e-learning courses", *Food and Agriculture Organization*.
- Glasier, A., Gülmezoglu, A.M., Schmid, G.P., Moreno, C.G. & Van Look, P.F. 2006, "Sexual and reproductive health: a matter of life and death", *The Lancet*, vol. 368, no. 9547, pp. 1595-1607.
- Gordon, C.P. 1996, "Adolescent decision making: A broadly based theory and its application to the prevention of early pregnancy", *Adolescence*, vol. 31, no. 123, pp. 561.
- Goto, A., Rudd, R. E., Lai, A.Y., & Yoshida, K. 2014, "Health literacy training for public health nurses in Fukushima: A case study of program adaptation, implementation and evaluation", *JMAJ*, vol. 57, no. 3, pp. 144-153.
- Graber, J.A., Brooks-Gunn, J. & Galen, B.R. 1998, "Betwixt and between: Sexuality in the context of adolescent transitions",

Grace, L.G., Starck, M., Potenza, J., Kenney, P.A. & Sheetz, A.H. 2012, "Commercial sexual exploitation of children and the school nurse", *Journal of School Nursing*, vol. 28, no. 6, pp. 410-417.

Gray, D.E. 2013, "Doing research in the real world", Sage.

Gray, N., Azzopardi, P., Kennedy, E., Willersdorf, E. & Creati, M. 2013, "Improving adolescent reproductive health in Asia and the Pacific: do we have the data? A review of DHS and MICS surveys in nine countries", *Asia-Pacific Journal of Public Health / Asia-Pacific Academic Consortium for Public Health*, vol. 25, no. 2, pp. 134-144.

Greenlee, B.J. & Karanxha, Z. 2010, "A study of group dynamics in educational leadership cohort and non-cohort groups", *Journal of Research on Leadership Education*, vol. 5, no. 11, pp. 357-382.

Gregg, A.L. & Wozar, J.A. 2003, "Delivering Internet health resources to an underserved health care profession: school nurses", *Journal of the Medical Library Association: JMLA*, vol. 91, no. 4, pp. 398-403.

Griffin, M.A., Neal, A. & Parker, S.K. 2007, "A new model of work role performance: Positive behavior in uncertain and interdependent contexts", *Academy of Management Journal*, vol. 50, no. 2, pp. 327-347.

Griffin, M.T.Q. & Landers, M.G. 2014, "Extant Nursing Models and Theories: Grand and Middle Range Theories in Nursing", *Making Nursing Knowledge Development Explicit*, pp. 15.

Griffin, M.R. & Keen, C.M. 2013, "Experiential learning in the workplace" *Current Applications and New Developments*,

Gross, M. & Yip, A.K. 2010, "Living spirituality and sexuality: A comparison of lesbian, gay and bisexual Christians in France and Britain", *Social Compass*, vol. 57, no. 1, pp. 40-59.

Grove, S.K., Gray, J.R. & Burns, N. 2014, *Understanding Nursing Research: Building an Evidence-Based Practice*, Elsevier Health Sciences

Gunn, V. & House, S. 2007, "Approaches to small group learning and teaching", Glasgow, *University of Glasgow Learning and Teaching Centre*,

Gwet, K.L. 2008, "Computing inter-rater reliability and its variance in the presence of high agreement", *British Journal of Mathematical and Statistical Psychology*, vol. 61, no. 1, pp. 29-48.

Halpern-Felsher, B. 2009, "Adolescent Decision Making: An Overview.", *Prevention Researcher*, vol. 16, no. 2, pp. 3-7.

Hammersley, M. 1995, "The politics of social research", Sage.

Hayter, M., Owen, J. & Cooke, J. 2012, "Developing and establishing school-based sexual health services: issues for school nursing practice", *The Journal of School Nursing*, vol. 28, no. 6, pp. 433-441.

- Healey, M. & Jenkins, A. 2000, "Kolb's experiential learning theory and its application in geography in higher education", *Journal of Geography*, vol. 99, no. 5, pp. 185-195.
- Hendry, L. & Kloep, M. 2012, *Adolescence and adulthood: Transitions and transformations*, Palgrave Macmillan.
- Hennink, M., Hutter, I. & Bailey, A. 2010, *Qualitative research methods*, Sage.
- Hines, M. 2006, "Prenatal testosterone and gender related behaviour", *European Journal of Endocrinology*, no. 155, pp. 115-121.
- Hobson, R.J., Scott, J. & Sutton, J. 2010, "Pharmacists and nurses as independent prescribers: exploring the patient's perspective", *Family Practice*, vol. 27, no. 1, pp. 110-120.
- Hoepfl, M.C. 1997, "Choosing qualitative research: A primer for technology education researchers",
- Hoghugh, M. 2004, "Parenting: an introduction", *Handbook of parenting: Theory and research for practice*, pp. 1-18.
- Holland, J. & Adkins, L. 1996, *Sex, sensibility, and the gendered body*, St. Martin's Press.
- Holland, R. 2012, "Designing and implementing training programmes-MDS-3". In A. V Arlington, ed., *Management Sciences for Health*, p. 1036
- Hootman, J. 2006, "School nursing staff management". In J. Selekman, ed., *A comprehensive text*, Philadelphia, P A: F A Davies Company
- Hootman, J., Houck, G.M. & King, M.C. 2002, "A program to educate school nurses about mental health interventions", *The Journal of School Nursing*, vol. 18, no. 4, pp. 191-195.
- Houghton, C. 2003, "A mentoring program for new school nurses", *The Journal of School Nursing*, vol. 19, no. 1, pp. 24-29.
- Huitt, W. 2011, "Analysing paradigm used in education and schooling", *Educational Psychology Interactive*, Valdosta State University.
- Hulton, L.J. 2001, "Adolescent Sexual Decision-Making: An Integrative Review", *Worldviews on Evidence-based Nursing. Online Journal of Knowledge Synthesis for Nursing*, vol. 8, no. 1, pp. 48-60.
- Hunt, D.P. 2003, "The concept of knowledge and how to measure it", *Journal of Intellectual Capital*, vol. 4, no. 1, pp. 100-113.
- Ibeagha, P.N. 2012, "Adolescent: Nigeria", In J.J Arnett, ed., *Adolescent psychology around the world. Sussex. Psychology Press*. pp. 61-71.
- Ifenkwe, G. 2013, "Educational development in Nigeria: Challenges and prospects in the 21st century", *Universal Journal of Education and General Studies*, vol. 2, no. 1, pp. 007-014.
- Imaledo, J.A., Peter-Kio, O.B. & Asuquo, E.O. 2013, "Pattern of risky sexual behavior and associated factors among undergraduate students of the University of Port Harcourt, Rivers State, Nigeria", *Pan African Medical Journal*, vol. 12, no. 1.



- Imaledo, J.A., Peter-Kio, O.B. & Asuquo, E.O. 2013, "Pattern of risky sexual behavior and associated factors among undergraduate students of the University of Port Harcourt, Rivers State, Nigeria", *Pan African Medical Journal*, vol. 12, no. 1.
- Inglis, T. & MacKeogh, C. 2012, "The double bind: Women, honour and sexuality in contemporary Ireland", *Media, Culture & Society*, vol. 34, no. 1, pp. 68-82.
- International Conference on Population Development. 1994, "Programme of action" *ICPD*.
- Jaffe, M.L. 1998, "*Adolescence*". New York: John Wiley & Sons, Inc.
- James, G. 2012, "Education and sexuality: towards addressing adolescents' reproductive health needs in Nigeria", *Current Research Journal of Social Sciences*, vol. 4, no. 4, pp. 285-293.
- Jayasekara, R.S. 2012, "Focus groups in nursing research: methodological perspectives", *Nursing outlook*, vol. 60, no. 6, pp. 411-416.
- Johnson, A.P. 2002, *A short guidance to action research* Allyn-Bacon Pub.
- Johnson, S.B., Blum, R.W & Giedd, J.N. 2009, "Adolescent maturity and the brain: the promise and pitfalls of neuroscience research in adolescent health policy", *Journal of Adolescent Health*, vol. 45, no. 3, pp. 216-221.
- Johnston, J.H. 2009, "The preparation of child health nurses in sexual health education: An exploratory study", *Nurse Education Today*, vol. 29, no. 8, pp. 845-849.
- Jost, M. 2000, "Guidance",
- Kenefick, H.W., Ravid, S., MacVarish, K., Tsoi, J., Weill, K., Faye, E. & Fidler, A. 2014, "On your time: online training for the public health workforce", *Health Promotion Practice*, vol. 15, no. 1 Suppl, pp. 48S-55S.
- Khatri, R., Schildbach, E., Schmitz, K., Silwal, P. & Van Teijlingen, E. 2013, "National Adolescent Sexual and Reproductive Health Programme: Mid-Term Evaluation Report",
- Kieft, R.A., de Brouwer, B.B., Francke, A.L. & Delnoij, D.M. 2014, "How nurses and their work environment affect patient experiences of the quality of care: a qualitative study", *BMC Health Services Research*, vol. 14, pp. 249-6963-14-249.
- Kim, E.J., Pai, A.J., Kang, N., Kim, W.K., Kim, Y.S., Moon, H. & Ha, A.W. 2012, "The effects of food safety education on adolescents' hand hygiene behavior: an analysis of stages of change", *Nutrition Research and Practice*, vol. 6, no. 2, pp. 169-174.
- Kitzinger, C. 1996, "Speaking of oppression: Psychology, politics, and the language of power", *Preventing heterosexism and homophobia*, pp. 3-19.
- Koch, L.C., Niesz, T. & McCarthy, H. 2013, "Understanding and reporting qualitative research: An analytical review and recommendations for submitting authors", *Rehabilitation Counseling Bulletin*, pp. 0034355213502549.
- Köhrsen, J. 2012, "How religious is the public sphere? A critical stance on the debate about public religion and post-secularity", *Acta Sociologica*, vol. 55, no. 3, pp. 273-288.

Kolb, A. & Kolb, D. 2008, "Experiential learning theory: A dynamic, holistic approach to management, learning, education and development". *Department of Organizational Behavior*, Case Western Reserve University.

Kroger, J. 2004, *Identity in adolescence: The balance between self and other*, Psychology Press.

Kukuru, J.D. 2012, "Encouraging Representation and Involvement of Learners on Discussion Method's Features toward Ensuring Effective Teaching", *Prime Research on Education*, vol. 2, no. 2, pp. 180-190.

Lambo, E. *National Strategic Framework on the Health and Development of Adolescents and Young People in Nigeria, 2007-2011*,

Landa, J.M.A. & López-Zafra, E. 2010, "The impact of emotional intelligence on nursing: An overview", *Psychology*, vol. 1, no. 1, pp. 50-58.

Larson, K., Clark, A., Colborn, B., Perez, A., Engelke, M.K. & Hill, P. 2011, "A School-Based Health Center-University Nursing Partnership: How We Filled in the GAPS", *The Journal of School Nursing*, vol. 27, no. 6, pp. 404-410.

Laumann, E.O., Michael, R.T. & Michaels, S. 2000, *The Social Organization of Sexuality: Sexual Practices in the United States*, University of Chicago Press.

Lenz, B. 2001, "The transition from adolescence to young adulthood: a theoretical perspective", *The Journal of School Nursing*, vol. 17, no. 6, pp. 300-306.

Lewis-Beck, M., Bryman, A.E. & Liao, T.F. 2003, *The Sage Encyclopaedia of Social Science research methods*, Sage Publications

Lim, S.W., Chhabra, R., Rosen, A., Racine, A.D. & Alderman, E.M. 2012, "Adolescents' views on barriers to health care: a pilot study", *Journal of Primary Care & Community Health*, vol. 3, no. 2, pp. 99-103.

Lippa, R.A. 2005, *Gender, nature, and nurture*, Routledge.

Litwin, M.S. 1995, *How to measure survey reliability and validity*, Sage Publications.

LoBiondo-Wood, G. & Haber, J. 2010, "Reliability and validity": Methods and critical appraisal for evidence-based practice" *Nursing Research* pp. 285-308.

Loh, J. 2013, "Inquiry into issues of trustworthiness and quality in narrative studies: A perspective", *The Qualitative Report*, vol. 18, no. 33, pp. 1.

Londt, M.P. 2004, *Management of domestic violence: risk-based assessment and intervention guidelines with perpetrators of intimate violence*,

Luszczoski, K.D. & Rue, L.A. 2012, "The OPTIONS model of sexual risk assessment for adolescents", *Health Promotion Practice*, vol. 13, no. 2, pp. 230-237.

Mabuza-Mokoko, E. & Malekgota, A. 2005, "Towards developing a policy framework on risky behavior among commercial sex workers: an intervention research study",

McCarthy-Ribbens, J. & Edwards, R. 2011, "Key concepts in family studies",

- Magalnick, H & Mazyck, D. 2008, "Role of the school nurses in providing school health services" *Pediatrics*, vol 121, no. 5, pp. 1052-1056.
- Main, K. 2011, "Program design: A literature review of best practices". University Way of Calgary and Area. pp. 1-17
- Mansur, R., Abubakar, I., Mansur, O., Aminu, K. & Balarabe, I. 2015, "Using peer led health education intervention to improve in-school adolescents' cigarette smoking related knowledge, attitude and behaviour in a North West Nigeria State", .
- Mason-Jones, A.J., Crisp, C., Momberg, M., Koech, J., De Koker, P. & Mathews, C. 2012, "A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health", *Systematic Reviews*, vol. 1, no. 1, pp. 1.
- Mathers, N., Fox, N., & Hunn, A. 1998, "Using interviews in a research project", *Treat Focus Group*, pp. 1-34.
- Matthew, I.A. 2013, "Provision of secondary education in Nigeria: Challenges and way forward", *Journal of African Studies and Development*, vol. 5, no. 1, pp. 1-9.
- Maxwell, J.A. 2012, *Qualitative research design: An interactive approach: An interactive approach*, Sage.
- McCall, D. 2004, "School-based and school-linked sexual health education and promotion in Canada", *J Obstet Gynaecol Can*, vol. 26, no. 6, pp. 596-605.
- McCloughen, A. & O'Brien, L. 2005, "Development of a mentorship programme for new graduate nurses in mental health", *International Journal of Mental Health Nursing*, vol. 14, no. 4, pp. 276-284.
- Mejia Arauz, R., Sheets, R., Villasenor, M. 2012, "Adolescence: Mexico". In J Arnett, ed. *Adolescent psychology around the world*. Suzzex. Psychology Press. pp. 195-210.
- Merriam, S., Caffarella, R. & Baumgartner, L. 2007, "Self-directed learning", *Learning in adulthood: a comprehensive guide. 3rd ed.* San Francisco, CA: Jossey-Bass,
- Merriam, S.B. & Tisdell, E.J. 2015, *Qualitative research: A guide to design and implementation*, John Wiley & Sons.
- Mertens, D.M. 2014, "Integrating diversity with quantitative, qualitative, and mixed methods", *Research and Evaluation in Education and Psychology*, Sage Publications.
- Mertz, N. & Anfara, V. 2006, "Conclusion: coming full circle", *Theoretical Frameworks in Qualitative Research*, pp. 189-196.
- Metcalfe, T. 2004, "Sexual health: meeting adolescents' needs", *Nursing standard*, vol. 18, no. 46, pp. 40-43.
- Mills, A.J., Durepos, G. & Weibe, E. 2009, "Encyclopedia of case study research", Sage Publications.
- Millward, L. 2012, "Focus groups" In Glynis M. Breakwell, Jonathan A. & Daniel B. Bright eds. *Research Methods in Psychology*, 4<sup>th</sup> edition, pp. 426.

- Missouri Comprehensive Guidance and Counselling Program. 2014, "Professional school counsellor: Small group counselling guide". Missouri: *MCGCP*
- Misulis, K. 1997, "Content analysis: A useful tool for instructional planning", *Contemporary Education*, vol. 69, no. 1, pp. 45.
- Moja, T. 2000, "Nigeria education sector analysis: An analytical synthesis of performance and main issues", *World Bank Report*.
- Morgan, D.L. 1996, "Focus groups as qualitative research", Sage publications.
- Morhason-Bello, I., Oladokun, A., Enakpene, C., Fabamwo, A., Obisesan, K. & Ojengbede, O. 2009, "Sexual behaviour of in-school adolescents in Ibadan, South-West Nigeria", *African Journal of Reproductive Health*, vol. 12, no. 2, pp. 89-97.
- Morrow, S.L. 2006, "Honor and respect: Feminist collaborative research with sexually abused women", *Qualitative research methods for psychologists: Introduction through empirical studies*, pp. 143-172.
- Moshman, D. 2011, *Adolescent rationality and development: Cognition, morality, and identity*, Taylor & Francis.
- Moya, C. 2002, "Life skills approaches to improving youth sexual and reproductive health."
- Mullen, E.J. 2013, "Design of social intervention", *Intervention research: Design and development for human service*, pp. 163-194.
- Mwamwenda, T. S. 2004, *Educational psychology: An African perspective*. Johannesburg: Heinmann Publishers (Pty) Ltd.
- National Association of School Nurses. 2011, "Role of the school nurse: A position statement", *National Association of School Nurses*, Silver Spring.
- National Association of School Nurses. 2012, "Sexual health education about human sexuality: A position statement", *National Association of School Nurses*, Silver Spring.
- National Center for Health Statistics (US) 2011, "Healthy people 2010" *Final review*, Government Printing Office.
- National Millenium Development Goals. 2004, "Nigeria's Profile", Available at [http://www.undg.org/arch\\_docs/5430](http://www.undg.org/arch_docs/5430). [Accessed 6 November, 2013].
- Nazzaro, A. & Strazzabosco, J. 2009, "Group dynamics and team building", *Development*, no. 4.
- Nies, M.A. & McEwen, M. 2014, *Community/public health nursing: Promoting the health of populations*, Elsevier Health Sciences.
- Nigeria National Petroleum Corporation. 2010, "Nigeria profile". Available at: <http://www.nnpcgroup.com>. [Accessed 14 Jan. 2014]
- Nigeria Population Commission. 2006, "National Census", *Nigeria Population Commission*, Abuja.

Norman K. Denzin & Yvonna S. Lincoln 2005, *The Sage handbook of qualitative research*, Sage.

Nurish, A. 2010, "Women's Same-sex Relations in Indonesian Pesantren", *Gender, Technology and Development*, vol. 14, no. 2, pp. 267-277.

Ogunfowokan, A.A. & Babatunde, O.A. 2009, "Management of primary dysmenorrhea by school adolescents in Ile-Ife, Nigeria", *The Journal of school nursing*, vol. 26, no. 2, pp. 131-136.

Ogunfowokan, A.A. 2010, "Opinions of part-time baccalaureate nursing students in school nursing practice in Nigeria", *Nigerian Journal of Nursing*, vol.1, no. 4, pp. 30-39.

Oh, H. & Solomon, P. 2014, "Role-playing as a Tool for Hiring, Training, and Supervising Peer Providers", *The Journal of Behavioural Health Services & Research*, vol. 41, no. 2, pp. 216-229.

Oh, W.O. 2005, "School nurses' knowledge, educational needs and providing education about internet addiction", *Korean Journal of Child Health Nursing*, vol. 11, no. 4, pp. 405-414.

Okonkwo, P., Fatusi, A. & Ilika, A. 2005, "Perception of peers' behaviour regarding sexual health decision making among female undergraduates in Anambra State, Nigeria", *African Health Sciences*, vol. 5, no. 2, pp. 107-113.

Oladipupo-Okorie, B. & Viatonu, O. 2014, "Influence of Family Characteristics and Cultural norms on Pre-marital sex among secondary school students in Ojo Local Government Area of Lagos State, Nigeria", *European Scientific Journal*, vol. 10, no. 5.

Olaore, A.Y. 2010, "Developing a practice guideline for a collaborative approach between the university and families of students involved with substance abuse at Babcock University Nigeria"

Olayiwola, O.O. 2013, "Technical efficiency of soya bean production in Ijebu Ode local government area of Ogun State, Nigeria", *International Monthly Referred Journal in Management and Technology*, vol. 11, pg. 8.

Onyeka, I.N., Miettola, J., Ilika, A.L. & Vaskilampi, T. 2011, "Unintended pregnancy and termination of studies among students in Anambra state, Nigeria: Are secondary schools playing their part?" *African Journal of Reproductive Health*, vol. 15, no. 2.

Opong, S.H. 2013, "The problem of sampling in qualitative research", *Asian Journal of Management Sciences and Education*, vol. 2, no. 2, pp. 202-210.

Ortner, S.B., & Whitehead, H. 2005 "Accounting for sexual meaning" In S.B Ortner, ed., *Sexual meanings: The cultural construction of gender and sexuality*, CUP Archive. pp. 1-28

Paine, S.C., Bellamy, G.T. & Wilcox, B. 1984, *Human services that work: From innovation to standard practice*, PH Brookes Pub. Co.

Panda, A. & Sehgal, A. 2009, "Impact of Information, Education and Communication on Adolescent Reproductive Health A Sociological Study of Mandi District, Himachal Pradesh", *Journal of Health Management*, vol. 11, no. 3, pp. 445-472.

- Parasuraman, S.R. & Shi, L. 2015, "Differences in Access to Care Among Students Using School-Based Health Centers", *The Journal of School Nursing*, vol. 31, no. 4, pp. 291-299.
- Park, M. & Jones, C.B. 2010, "A retention strategy for newly graduated nurses: an integrative review of orientation programs", *Journal for Nurses in Staff Development*, vol. 26, no. 4, pp. 142-149.
- Pepper, A.D. 1984, *Managing the training and development function*. Gower Publishing Company, Limited.
- Pfister-Minogue, K.A. & Salvesson, C. 2010, "Training and experience of public health nurses in using behavior change counseling", *Public Health Nursing*, vol. 27, no. 6, pp. 544-551.
- Pillard, R.C. & Bailey, J.M. 1998, "Human sexual orientation has a heritable component", *Human Biology*, pp. 347-365.
- Pilgrim, N.A. & Blum, R.A. 2012, "Protective and risk factors associated with adolescent and reproductive health in the English-speaking Caribbean: A literature review", *Adolescent Health*, vol. 50, no. 1, pp. 5-23.
- Plummer, M. & Molzahn, A.E. 2009, "Quality of life in contemporary nursing theory: a concept analysis", *Nursing Science Quarterly*, vol. 22, no. 2, pp. 134-140.
- Population Reference Bureau. 2012, "World population data sheet" *Population Reference Bureau*
- Ponterotto, J.G. 2002, "Qualitative Research Methods The Fifth Force in Psychology", *The Counselling Psychologist*, vol. 30, no. 3, pp. 394-406.
- Ramarumo, M. & Mudhovozi, P. 2012, "Discovery of, and response to husbands' HIV positive status: The groaning voices of Vhavenda women", *African Journal for Physical, Health Education, Recreation & Dance*.
- Reuterswård, M. & Lagerström, M. 2010, "The aspects school health nurses find important for successful health promotion", *Scandinavian Journal of Caring Sciences*, vol. 24, no. 1, pp. 156-163.
- Reyna, V.F. & Farley, F. 2006, "Risk and Rationality in Adolescent Decision Making: Implications for Theory, Practice, and Public Policy", *Psychological science in the public interest : a journal of the American Psychological Society*, vol. 7, no. 1, pp. 1-44.
- Richards, K.A.R. 2015, "Role socialization theory: The socio-political realities of teaching physical education", *European Physical Education Review*, vol. 21, no. 3, pp. 379-393.
- Rivers, S.E., Reyna, V.F. & Mills, B. 2008, "Risk taking under the influence: A fuzzy-trace theory of emotion in adolescence", *Developmental Review*, vol. 28, no. 1, pp. 107-144.
- Rivkin-Fish, M., Adams, V. & Pigg, S.L. 2005, *Sex in development: science, sexuality, and morality in global perspective*, Duke University Press.
- Røislien, H.E. 2013, "Religion and Military Conscription: The Case of the Israel Defence Forces (IDF)", *Armed Forces & Society*, vol. 39, no. 2, pp. 213-232.

- Rolfe, G. 2006, "Validity, trustworthiness and rigour: quality and the idea of qualitative research", *Journal of Advanced Nursing*, vol. 53, no. 3, pp. 304-310.
- Ros, M.Z. & Lizenberg, N. 2006, "Sequencing of contents and learning objects-part II", *RED: Revista de Educación a Distancia*, no. 14, pp. 2.
- Ross, K., Barr, J. & Stevens, J. 2013, "Mandatory continuing professional development requirements: what does this mean for Australian nurses", *BMC nursing*, vol. 12, no. 1, pp. 1.
- Rossmann, G.B. & Rallis, S.F. 2003, "*Learning in the field: An introduction to qualitative research*," Sage.
- Rothman, J. 1980, *Social R & D; research and development in the human services*, Prentice Hall.
- Rothman, J. & Thomas, E.J. 2013, "An integrative perspective on intervention research", *Intervention research: Design and development for human service*. pp. 4-20.
- Roudi-Fahimi, F. & Ashford, L. 2008, "Sexual and reproductive health in the Middle East and North Africa: A guide for reporters."
- Roulston, K.J. 2008, "Probes and probing". In Lisa M Given, ed., *The SAGE Encyclopaedia of qualitative research methods*. DOI: <http://dx.doi.org/10.4135/9781412963909>. n 340.
- Rowe, A.K., de Savigny, D., Lanata, C.F. & Victora, C.G. 2005, "How can we achieve and maintain high-quality performance of health workers in low-resource settings?" *The Lancet*, vol. 366, no. 9490, pp. 1026-1035.
- Royal College of Nursing. 2004, "Research ethics: RCN guidance for nurses" London. *Royal College of Nursing*
- Royal College of Nursing. 2014, "An RCN toolkit for school nurses: developing your practice to support children and young people in educational setting" London. *Royal College of Nursing*
- Rush, K.L., Adamack, M., Gordon, J., Lilly, M. & Janke, R. 2013, "Best practices of formal new graduate nurse transition programs: An integrative review", *International Journal of Nursing Studies*, vol. 50, no. 3, pp. 345-356.
- Russell, C. 2005, "An overview of the integrative research review", *Progress in Transplantation*, vol. 15, no. 1, pp. 8-13.
- Saewyc, E., Roy, J. & Foster, S. 2014, "An evaluation of North Shore Public Health Nurses' child and youth-linked practice" *Public Health Nursing*, vol. 31
- Safman, R.M. & Sobal, J. 2004, "Qualitative sample extensiveness in health education research", *Health Education & Behavior*, vol. 31, no. 1, pp. 9-21.
- Saito, J., Keosada, N., Tomokawa, S., Akiyama, T., Kaewviset, S., Nonaka, D., Waikugul, J., Kobayashi, J., Souvanvixay, M. & Jimba, M. 2015, "Factors influencing the National School Health Policy implementation in Lao PDR: a multi-level case study", *Health Promotion International*, vol. 30, no. 4, pp. 843-854.
- Salkind, N.J. 2010, *Encyclopedia of research design*, Sage.

- Sanchez, N.F., Sanchez, J.P. & Danoff, A. 2009, "Health care utilization, barriers to care, and hormone usage among male-to-female transgender persons in New York City", *American Journal of Public Health*, vol. 99, no. 4, pp. 713-719.
- Sandelowski, M. 1993, "Rigor or rigor mortis: the problem of rigor in qualitative research revisited", *Advances in Nursing Science*, vol. 16, no. 2, pp. 1-8.
- Santrock, J. 2010, "W. Adolescence, Thirteenth Edition",
- Saumure, K. & Given, L.M. 2008, "Data saturation", *The Sage encyclopedia of qualitative methods*, vol. 1, pp. 195-196.
- Sawyer, S.M., Afifi, R.A., Bearinger, L.H., Blakemore, S., Dick, B., Ezech, A.C. & Patton, G.C. 2012, "Adolescence: a foundation for future health", *The Lancet*, vol. 379, no. 9826, pp. 1630-1640.
- Schilling, R.F. 1997, "Developing intervention research programs in social work", *Social Work Research*, vol. 21, no. 3, pp. 173-180.
- Scotland, J. 2012, "Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of scientific, interpretive, and critical research paradigms. *English Language Teaching*, vol. 5, no. 9, pp. 9-16
- Schwandt, T.A. 2001, "Dictionary of qualitative inquiry".
- Sebuliba, D. & Vostanis, P. 2001, "Child and adolescent mental health training for primary care staff", *Clinical Child Psychology and Psychiatry*, vol. 6, no. 2, pp. 191-204.
- Sefertzi, E. 2000, *Creativity*. Retrieved June 14, 2013,
- Seidman, S. & Norton, W. 2003, *The social construction of sexuality*: New York.
- Shenton, A.K. 2004, "Strategies for ensuring trustworthiness in qualitative research projects", *Education for Information*, vol. 22, no. 2, pp. 63-75.
- Short, S. 2006, "Focus group interviews", *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design, Methodology, and Fieldwork*, pp. 103-116.
- Shrivastava, K. 2003, "Principles of guidance and counselling",
- Shucksmith, J., Hendry, L.B. & Glendinning, A. 1995, "Models of parenting: Implications for adolescent well-being within different types of family contexts", *Journal of Adolescence*, vol. 18, no. 3, pp. 253-270.
- Shuey, D.A., Babishangire, B.B., Omiat, S. & Bagarukayo, H. 1999, "Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti district, Uganda", *Health Education Research*, vol. 14, no. 3, pp. 411-419.
- Shum, C., Humphreys, A., Wheeler, D., Cochrane, M.A., Skoda, S. & Clement, S. 2000, "Nurse management of patients with minor illnesses in general practice: Multicentre, randomised controlled trial", *BMJ (Clinical research ed.)*, vol. 320, no. 7241, pp. 1038-1043.



- Shung-King, M. 2013, "From 'stepchild of primary healthcare' to priority programme: Lessons for the implementation of the National Integrated School Health Policy in South Africa", *SAMJ: South African Medical Journal*, vol. 103, no. 12, pp. 895-898.
- Sidani, S. & Braden, C.J. 2011, *Design, evaluation and translations of nursing interventions*. Oxford: Wiley-Blackwell. pg. 12.
- Sieber, J.E. 2009, "Planning ethically responsible research", *The Sage handbook of applied social research methods*, pp. 106-142.
- Sieloff, C.L. & Messmer, P.R. 2013, "Conceptual system and middle-range theory of goal attainment", *Nursing Theorists and Their Work*, pp. 258.
- Sigelman, C. & Rider, E. 2006, "Human growth and development across the lifespan",
- Smith, J.A., Flowers, P. & Larkin, M. 2009, "Interpretative Phenomenological Analysis: Theory", *Method and Research*. London: Sage,
- Smith, M.K. & Stepanov, N. 2014, "School-based youth health nurses and adolescent decision-making concerning reproductive and sexual health advice: How can the law guide healthcare practitioners in this context?" *Contemporary Nurse*, vol. 47, no. 1-2, pp. 42-50.
- Smith, A.C. 2011, "Role ambiguity and role conflict in nurse case managers: an integrative review", *Professional Case Management*, vol. 16, no. 4, pp. 182-96; quiz 197-8.
- Smith, S.G. & Firmin, M.W. 2009, "School nurse perspectives of challenges and how they perceive success in their professional nursing roles", *The Journal of School Nursing*, vol. 25, no. 2, pp. 152-162.
- Society for Adolescent Health and Medicine. 2014, "Sexual and reproductive health care: A position paper", *Journal of Adolescent Health*. No. 54
- Steele, R.G., Wu, Y.P., Jensen, C.D., Pankey, S., Davis, A.M. & Aylward, B.S. 2011, "School nurses' perceived barriers to discussing weight with children and their families: A qualitative approach", *Journal of School Health*, vol. 81, no. 3, pp. 128-137.
- Steinberg, L. 2007, "Risk taking in adolescence new perspectives from brain and behavioral science", *Current Directions in Psychological Science*, vol. 16, no. 2, pp. 55-59.
- Strydom, H., Steyn, M. & Strydom, C. 2007, "An adapted intervention research model: Suggestions for research and practice", *Social Work*, vol. 43, no. 4, pp. 329.
- Tamale, S. 2011, "Researching and theorising sexualities in Africa", *African sexualities: A reader*, pp. 11-36.
- Tannenbaum, S.I. & Yukl, G. 1992, "Training and development in work organizations", *Annual Review of Psychology*, vol. 43, no. 1, pp. 399-441.
- Thakor, H.G. & Kumar, P. 2000, "Impact assessment of school-based sex education program amongst adolescents", *The Indian Journal of Pediatrics*, vol. 67, no. 8, pp. 551-558.
- Thorne, S. 2000, "Data analysis in qualitative research", *Evidence Based Nursing*, vol. 3, no. 3, pp. 68-70.

- Thorpe, R. & Holt, R. 2007, *The Sage dictionary of qualitative management research*, Sage.
- Thronson, G. 2006, "School nurse study: Report on health services in Washington State class districts, assessing school nursing services". *Washington State Department*, pp. 1-93
- Tonkin, R.S. & Frappier, J.Y. 2003, "Adolescent health-a developing international discipline", *Paediatrics & Child Health*, vol. 8, no. 2, pp. 72-73.
- Toseland, R.W. & Rivas, R.F. 2005, *An Introduction to Group Work Practice*, Boston, MA: Allyn and Bacon.
- Tschombe, T.M.S., & Lo-oh, J. 2012, "Adolescent: Cameroon", In J.J Arnett, ed., *Adolescent psychology around the world*. Sussex. Psychology Press. pp. 3-13.
- Turner III, D.W. 2010, "Qualitative interview design: A practical guide for novice investigators", *The Qualitative Report*, vol. 15, no. 3, pp. 754.
- Turner, R.H. 2001, "Role theory". *Handbook of sociological theory*, Springer, pp. 233-254.
- United Nations Children Fund. 2002, "Adolescence: A time that matters". UNICEF
- United Nations Children Fund. 2011, "State of the world children; adolescents: An age of opportunity". New York: *United Nations Children Fund*
- United Nations Educational, Scientific and Cultural Organisation. 2011, "Motivating for skills development: A guide to being successful facilitator", A campaign Package: *UNESCO*
- United Nations Population Fund. 2000, "Annual report", *UNFPA*.
- United Nations Population Fund. 2009, "Adolescent sexual and reproductive health: Toolkit for humanitarian setting", *UNFPA*.
- Van Teijlingen, E. & Hundley, V. 2002, "The importance of pilot studies", *Nursing Standard*, vol. 16, no. 40, pp. 33-36.
- Visagie, S. & Schneider, M. 2014, "Implementation of the principles of primary health care in a rural area of South Africa", *African Journal of Phealth care & Family Medicine*, vol. 6, no. 1, pp. 1-10.
- Vogt, W.P. 2007, *Quantitative research methods for professionals*, Boston, MA: Pearson/Allyn and Bacon, Boston, MA.
- Vought-O'Sullivan, V., Meehan, N.K., Havice, P.A. & Pruitt, R.H. 2006, "Continuing education: A national imperative for school nursing practice", *The Journal of School Nursing*, vol. 22, no. 1, pp. 2-8.
- Wall, J.E. & Solutions, S. 2014, "Program evaluation model 9-step process", *Sage Solutions*. <http://region11s4.lacoe.edu/attachments/article/34>, vol. 287, no. 29, pp. 209.
- Wamoyi, J., Mshana, G., Mongi, A., Neke, N., Kapiga, S. & Chagalucha, J. 2014, "A review of interventions addressing structural drivers of adolescents' sexual and reproductive health vulnerability in sub-Saharan Africa: implications for sexual health programming", *Reproductive Health*, vol. 11, pp. 88-4755-11-88.

- Wang, Y. & Ruhe, G. 2007, "The cognitive process of decision making",
- Warenius, L.U., Faxelid, E.A., Chishimba, P.N., Musandu, J.O., Ong'any, A.A. & Nissen, E.B. 2006, "Nurse-midwives' attitudes towards adolescent sexual and reproductive health needs in Kenya and Zambia", *Reproductive Health Matters*, vol. 14, no. 27, pp. 119-128.
- Warria, A. 2014, "Development of psychosocial intervention guidelines for transnational trafficked children".
- Westwood, J. & Mullan, B. 2006, "Knowledge of school nurses in the UK regarding sexual health education", *The Journal of School Nursing*, vol. 22, no. 6, pp. 352-357.
- Whitehead, T.L. 2005, "Basic classical ethnographic research methods", *Cultural Ecology of Health Change*,
- Whitford, M. 1991, "Irigaray's body symbolic", *Hypatia*, vol. 6, no. 3, pp. 97-110.
- Whitmarsh, J. 1997, "School nurses' skills in sexual health education", *Nursing Standard*, vol. 11, no. 27, pp. 35-41.
- Whittemore, R. & Knafl, K. 2005, "The integrative review: updated methodology", *Journal of Advanced Nursing*, vol. 52, no. 5, pp. 546-553.
- Williams, R.H. & Josephson, T.J. 2013, "North American sociology of religion: Critique and prospects", *Critical Research on Religion*, vol. 1, no. 1, pp. 62-71.
- William, C.L., & Stein, A. 2001, "*Sexuality and gender*". New York: Wiley-Blackwell.
- Winkelstein, M.L., Quartey, R., Pham, L., Lewis-Boyer, L., Lewis, C., Hill, K. & Butz, A. 2006, "Asthma education for rural school nurses: Resources, barriers, and outcomes", *The Journal of School Nursing*, vol. 22, no. 3, pp. 170-177.
- Wolff, J.M. & Crockett, L.J. 2011, "The role of deliberative decision making, parenting, and friends in adolescent risk behaviors", *Journal of Youth and Adolescence*, vol. 40, no. 12, pp. 1607-1622.
- Wong, A. & Premkumar, K. 2007, "An introduction to mentoring principles, processes, and strategies for facilitating mentoring relationships at a distance", *Online: <http://www.usask.ca/qmcte/drupal>*.
- World Health Organization. 2003, "Adolescent reproductive rights", *World Health Organization*
- World Health Organization. 2003, "The World Health Organization's Information Series on School Health", *World Health Organization*
- World Health Organization. 2006, "Improving health worker performance: In search of promising practices", *Department of Human Resources for Health, World Health Organization*
- World Health Organization. 2009, "Milestones in health promotion", *Statement from Global Conference*. Geneva.
- World Health Organization. 2012, "Health education: Theoretical concepts, effective strategies and core competencies", *World Health Organisation*

- World Health Organization. 2014, "Adolescent development", *World Health Organization*
- Yang, J., Liu, Y., Huang, C. & Zhu, L. 2013, "Impact of empowerment on professional practice environments and organizational commitment among nurses: A structural equation approach", *International Journal of Nursing Practice*, vol. 19, no. S1, pp. 44-55.
- Yilmaz, K. 2013, "Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences", *European Journal of Education*, vol. 48, no. 2, pp. 311-325.
- Young, P.D. 2010, "Taking Account of Religion in Canada: The Debates over Gay and Lesbian Marriage", *Studies in Religion/Sciences Religieuses*, vol. 39, no. 3, pp. 333-361.
- Zhang, S.L., Deyoe, N. & Matveyeva, S.J. 2007, "From scratch: developing an effective mentoring program".
- Zuo, X., Lou, C., Gao, E., Cheng, Y., Niu, H. & Zabin, L.S. 2012, "Gender differences in adolescent premarital sexual permissiveness in three Asian cities: effects of gender-role attitudes", *Journal of Adolescent Health*, vol. 50, no. 3, pp. S18-S25.



## APPENDICES

### Appendix 1



#### OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

15 June 2015

#### To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:  
Mr OA Ogunyewo (School of Nursing)

Research Project: Development of an intervention programme for school health nurses on guiding adolescents in decision making on reproductive health in Ijebu Ode Local Government of Nigeria.

Registration no: 15/4/31

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

*Ms Patricia Josias  
Research Ethics Committee Officer  
University of the Western Cape*

Private Bag X17, Bellville 7535, South Africa  
T: +27 21 959 2988/2948 . F: +27 21 959 3170  
E: pjosias@uwc.ac.za  
www.uwc.ac.za

A place of quality,  
a place to grow, from hope  
to action through knowledge

## Appendix 2

TELEGRAMS COMMEDUCAT  
PRIVATE MAIL BAG No. 2060

Telephone.....

# MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY

## DEPARTMENT OF EDUCATION SUPPORT SERVICES

ABEOKUTA, OGUN STATE, NIGERIA

3<sup>rd</sup> June, 2015

Date:.....

Your Ref: No.....  
All communications should be addressed  
to the Commissioner quoting:

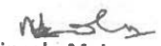
Our Ref: No  
ESS:I/367/192:.....

Mr. Ogunyewo Oluwatoyin Abayomi  
Faculty of Community and Health Science,  
University of Western Cape,  
South Africa.

### REQUEST FOR PERMISSION TO COLLECT DATA IN SCHOOLS.

Your letter dated 30<sup>th</sup> January, 2015 on the above subject refers please.

2. I am directed to convey to you the approval of the Permanent Secretary Ministry of Education, Science and Technology concerning your request to collect data in some selected schools in Ijebu-Ode Local Government Area of the State.
3. This approval is granted on the following conditions:
  - i. The project will not have any financial implication on the students and the schools;
  - ii. The project will not disturb academic activities in the schools
  - iii. The Zonal Education Officer, Ijebu-Ode Local Government will be informed before embarking on the project in schools;
  - iv. The research work will be used for the purpose it is intended for i.e making of decision on Reproductive Health in the State.
4. Principals are kindly enjoined to render all necessary assistance to the researcher.
5. Thank you.

  
Akinsolu M. I  
For: Permanent Secretary  
Ministry of Education,  
Science and Technology

Appendix 3

**MINISTRY OF HEALTH**  
**ABEOKUTA, OGUN STATE, NIGERIA**



**DEPARTMENT OF PUBLIC HEALTH**

*Your ref: AS/154/Vol.11/178/32....*  
*All communication should be addressed*  
*To the permanent secretary quoting:*  
*Our ref: No.*

*Date: June 5<sup>th</sup>, 2015*

**APPROVAL TO COLLECT DATA ON SCHOOL HEALTH**  
**PROGRAMME IN OGUN STATE**



UNIVERSITY of the  
WESTERN CAPE

Dear Mr. Ogunyewo

I wish to inform you that you have been granted approval to interview selected school health Nurses on school health programme in Ijebu Ode LGA Ogun State Nigeria.

The concerned officers have been informed accordingly

Wishing you success in your research work.

Many thanks.

*Aminu S. O.* 5/6/15

**Aminu S. O.**  
Coordinator SHP  
For: Director Public Health

## Appendix 4



# UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

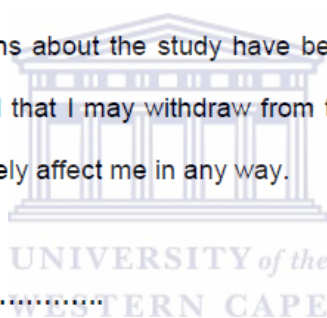
Tel: +27 21-959, Fax: 27 21-959

**E-mail:**

## CONSENT FORM

**Title of Research Project:** Development of an intervention programme for school health nurses on guiding adolescents in decision making about reproductive health in Ijebu Ode Local Government Area of Nigeria.

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.



**Participant's name**.....

**Participant's signature**.....

**Witness:** Ogunyewo, Oluwatoyin Abayomi

**Date:**

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

**Study Coordinator's Name:**

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-

Cell: +27 (0) 220 232 06



## Appendix 5

### DEPARTMENT OF PHYSIOTHERAPY

Private Bag X17, Bellville, 7535  
South Africa

Tel : 0848564343

Email : 3302415@myuwc.ac.za

30th of August, 2015.

To whom it may concern:

This letter serve as a confirmation that I was requested by Mr Ogunyewo Toyin to act as co-coder and that i co-coded data collected in the study " Development of an intervention

Programme for school health nurses on guiding adolescents in decision making on reproductive health in Ijebu Ode Local Government area, Nigeria".

Yours Sincerely

Ms Arowoija Ayorinde (PHD Candidate)

Tel: 0848564343

A.I.



UNIVERSITY of the  
WESTERN CAPE

A place of quality, a place to grow, from hope to action through knowledge

**MINISTRY OF HEALTH  
ABEOKUTA, OGUN STATE, NIGERIA**



**DEPARTMENT OF PUBLIC HEALTH**

Your ref: A.S/154/Vol.11/178/33.....  
All communication should be addressed  
To the permanent secretary quoting:  
Our ref: No.

Date: JAN 6TH 2016

PERMISSION TO CONDUCT PILOT TEST FOR SCHOOL HEALTH  
NURSES ON GUIDING ADOLESCENT IN DECISION MAKING IN  
REPRODUCE HEALTH; ABEOKUTA NORTH L.G.A, OGUN STATE

UNIVERSITY of the  
WESTERN CAPE

Dear Mr Ogunyewo,

I wish to inform you that you have been granted permission to conduct a pilot test for school health nurses in Abeokuta north local government on guiding adolescent in decision making in reproductive health.

The concerned officers have been informed accordingly.

Wishing you success in your research work.

Many thanks.

A handwritten signature in black ink, appearing to read 'Aminu S. O.' with a flourish.

Aminu S. O.  
Coordinator SHP  
For: Director Public Health

## Appendix 7

### Lesley Watson Cushman

(MA Applied Linguistics, University of Durham)

Academic Editing

---

13 Fourth Avenue

Fairways

Cape Town

7800

+27 21 705 1025

lesleywatsoncushman@yahoo.com

5 August 2016

TO WHOM IT MAY CONCERN

This statement serves to confirm that I edited the doctoral thesis of Oluwatoyin A Ogunyewo (Student number: 3315068), submitted for the degree of Doctor Philosophiae in the School of Nursing, University of the Western Cape.

Title of Thesis

THE DEVELOPMENT OF AN INTERVENTION PROGRAMME FOR SCHOOL HEALTH NURSES, ON GUIDING ADOLESCENTS IN THEIR DECISION-MAKING ABOUT REPRODUCTIVE HEALTH IN IJEBU ODE LOCAL GOVERNMENT AREA OF NIGERIA

Editing and further comment were completed between 26 July and 4 August 2016.

Yours faithfully

Mrs L Cushman

