AN INQUIRY INTO THE FEASIBILITY OF INTEGRATION OF THE ADVANCED MIDWIFERY AND NEONATOLOGY CLINICAL NURSE SPECIALIST IN THE DISTRICT HEALTH SYSTEM: THE ZAMBIAN EXPERIENCE

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ABSTRACT

Research has shown that there is a problem in the delivery of quality care in maternal and child health services in Zambia. The 1996 Zambia demographic and health survey estimated maternal mortality rate as high as 649 per 100,000 live birth, with this reason among others, human resource constraints and low number of supervised antenatal clinics, deliveries and postnatal clinics by skilled personnel as some of the reasons for the high maternal mortality. Selected studies identify the role of a CNS in Advanced Midwifery and Neonatology who has acquired the knowledge and practical skills to bring about the desired impact of quality care in safe mother hood in order to bring down the high maternal mortality rates. In order to achieve this, the government needs to integrate the advanced midwifery and neonatology clinical nurse specialist in the health system. It was the purpose of the study to inquire into the feasibility of integration of advanced midwifery and neonatology CNS in Ndola District Health system. A qualitative approach using two focus group discussions comprising of doctors and nurses involved in maternal and neonatal health provision and one in-depth individual interview. A purposive sampling was done representing all-important subgroups from Ndola District Health system. The audio taped data from the focus group discussions and individual interview was thematically analysed. The findings of the study were that all the groups felt that there are more advantages than disadvantages to the integration of the advanced midwifery and neonatology Clinical Nurse Specialist. The best placement for the CNS was said to be at the health centre, though there was need to provide equipment and solve other logistical problems, in order for the CNS to use her specialized skills more effectively.

November 2004

DECLARATION

I hereby declare that this thesis *An inquiry into the feasibility of integration of the Advanced Midwifery and Neonatology Clinical Nurse specialist in the District health System: The Zambian experience*, is my own work and that I have not submitted it or any part of it for a degree at any other University within or outside Africa. All the sources I have used or quoted have been acknowledged by means of complete references.

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DATE	

DR. N. MBOMBO (Supervisor)

DEDICATION

This thesis is dedicated to the memory of my beloved father, Mr. Simon Mwenya Kabamba who passed away in 1965.

My mother, Margret Mubanga Mpundu Musabandesu for her love and sacrifice for me to be what I am today.

My beloved daughter, Micah Mubanga Lufoma. You have been and are a blessing, source of inspiration and my all weather best friend. Thank you for believing in me and for loving me under very trying circumstances. You are indeed the crown of my joy.



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Dear Lord God Almighty to you alone.

I ascribe all the Honour, the Glory, Power, Authority and Majesty " IN ALL PLACES YOU

RULE". (Psalms 103 v 19, 146 v 10).

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ABBREVIATIONS

CNS	-	Clinical Nurse Specialist
APRN	-	Advanced Practitioner Registered Nurses
ANNP	-	Advance Neonatal Nurse Practitioner
DHS	-	District Health System
WHO	-	World Health Organisation
ICM	-	International Confederation for Midwifes
FIGO	-	Federation of Gynecology and Obstetrics
UNICEF	-	United Nations Children's Fund
UNIFPA	-	United Nations Population Fund
ANA	-	American Nurses Association
NP	-	Nurse practitioner

KEY WORDS

Clinical Nurse Specialist Advanced Midwifery and Neonatology Maternal child and Health Services Quality health care District Health System Maternal mortality Safe Motherhood Focus Groups Thematic Analysis Integration



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CHAPTER ONE

1. ORIENTATION TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND.

The study was carried out in the district of Dole, Zambia. Ndola District is located in the Copperbelt province of Zambia. The District is at an altitude of 1 270 meters above sea level. It is located 320 kilometers North of Lusaka, the Capital city of Zambia. Ndola is an industrial and mining town with an estimated population of 449,627 (CSO) in 1996. The town is known as the gateway to the Copper belt. It has good road and railway networks. Telephones, telex and e-mail services are available. The District is the regional headquarters for the Copper belt Province.

The District's populations are as follows:

- Total population- 449,627
- Child nearing age group- 103,414 (23%)
- Children 0 to 11 months- 17,985 (4%)
- Children 12 months to 5 years- 94,422 (21%)
- Estimated pregnancies- 24,280 (5.4%)
- Estimated deliveries- 23, 381 (5.2%)
- Estimated live births- 22,256 (4.9%)

Zambia is a third world country; development is very poor due to the very bad economic status. The poor economic status has led to a breakdown in all areas of human endeavor, which includes the conditions of health service. This has resulted in shortages of various staff including doctors and nurses. These essential workers have had to leave the country to look for better paying jobs (UNICEF, 1994). Since the late 1970's, the price of copper, the country's principal export, has been falling, resulting in the rise on all other prices and a heavy dependence on imports. This in turn has weakened Zambia's economy resulting in worsening employment opportunities and poor income. Essential commodities and services are in short supply and inflation has reached levels of over 100% (Zambia Department of Social Development Studies, University of Zambia and Central statistics Office, 1992). In 1993, a situation analysis for safe motherhood in Zambia was done by Family Care International, and in a rapid evaluation of maternal and child health and family planning services in Zambia, it was noted by Care International that; health facilities were unable

to provide basic services primarily because of lack of supplies and lack of trained personnel. Only 55% of staff interviewed felt they could handle obstetric emergencies and only 58% felt they had enough time and space to conduct antenatal clinics.

In this particular evaluation, transportation was also found to be a major barrier, 75% of the population was said to be living within 12 kilometers of a health facility, a significant number of people were living up to 30 kilometers away in areas where no public transport exists.

A study conducted in the western province of Zambia reflected lower rates of trained assistance during delivery of babies in rural areas and this roughly corresponds with the rates found in the District Health System. At times, services at the referral level (District Hospitals) are inadequate due to lack of physicians or other appropriately trained staff, resulting in complicated cases or risky pregnancies to be left in the hands of ill prepared staff. (Faber, and Koster-oyekan, 1994).

In the theory, 89% of health services offer family planning services but the reality is closer to 30% due to shortage in trained staff and contraceptives according to United Nations Population Fund (1998).

Currently the Ministry of Health employs 400 doctors and 10 000 other formal health workers who are concentrated in urban areas, while facilities serving the rural 58% of the population are left in the hands of ill trained staff. There is no systematic program for refresher courses or continuing education, which makes it very difficult for health providers to keep up to date with current views on medical advances. Nursing pre-service Curriculum has a very brief section on emergency obstetrics and the orientation of students towards working in rural settings is inadequate.

In addition to this scenario, nearly 3 000 traditional birth attendants have been trained, however, the programme is experiencing a very high drop-out rate which has been attributed to a lack of support and supervision at the district level and lack of incentives, either from the community or the formal health sector (UNICEF, 1994).

According to the joint statement by World Health Organisation (WHO) the International Confederation of Midwives (ICM) and the International Federation of Gynecology (FIGO) recommends that because Traditional Birth Attendants (TBA) already exist in many developing country communities, it has been suggested that they could perform the role of the skilled attendant where required, with some training. However research done indicates that training of TBAs has not contributed to reduction of maternal mortality. It is recognized that for some women TBAs are the only source of care available during pregnancy. Experience from some countries such as Malaysia has shown TBAs can become an important element in a county's safe motherhood strategy and can serve as key partners for increasing the number of births at which skilled attendants are present.

According to WHO, it is now generally accepted that one of the main reasons why TBA-based maternity care programmes of the past did not work, or was unsustainable, was that the programmes failed to link TBAs to a functioning health system. Hence, in many instances, the TBAs did not work within an enabling environment, i.e. one in which health care providers at primary, secondary and tertiary levels of the health system function as a team, and in which drugs and equipment are available and effective supervision and systems of referral are in place, (WHO, 2004).



In 1992, the country of Zambia through the Ministry of Health, committed itself to provide Zambians with equity of access to cost effective and quality health care; for the individual the family and the community, focusing on vulnerable groups including safe motherhood. This is in line with both Health Reform Programmes instituted in 1992 and the Programme of Action of the 1994 Care International Conference on Population and Development Zambia, which developed the Reproductive Health Sub-Programme with safe motherhood as a priority initiative (Maternal Mortality in Zambia, 1998).

Furthermore, research has shown that there is a problem in the delivery of quality care in maternal and child health services in Zambia. Maternal Mortality in Zambia, 1998 (1998) quote various studies showing high levels of maternal mortality, it is estimated that the maternal mortality rate ranges from more than 800 per 100 000 births in rural areas to 649 per 100 000 in urban areas. According to existing literature, the main direct causes of maternal mortality rates in Zambia include sepsis, hemorrhage, induced abortion, eclampsia, and ruptured uterus. These causes may be worsened by human resource constraints and low numbers of professionally supervised

deliveries due to shortage of doctors and non-availability of properly trained man-power (UNICE, 1994).

Clinical Nurse Specialist, who, according to (Humphries, 1994) are committed to a range of initiatives aimed at constantly improving the quality of the National Health Service, should be integrated in the district health system. With all theses initiatives the Clinical Nurse specialists are presented with unrivalled opportunities to bring about the desired change in the delivery of health services, improving on the patients' chatter and reducing on junior doctors' hours.

Stanhope and Lancaster (1996) further argues that Clinical Nurse Specialist' clients are individuals, families or risk groups, including communities, with the ultimate goal of promoting the health of the community, through the frame work of individualized care. They stress the fact that the Clinical Nurse Specialist's preparation to serve the community should include a master's degree, which is based on the synthesis of current knowledge and research in nursing and other scientific disciplines.



In addition to performing the functions of the generalist, clinical nurse specialists should possess clinical expertise in interdisciplinary planning, organizing, delivery and evaluation services, community empowerment; political legislative activities as well as demonstrate the ability to assume a leadership role in interventions that have positive impacts on the community's health.

A paper presented by Mdakane cited in Dewar (1998) highlights a pilot study, which was done at Charles Johnson's Memorial Hospital in South Africa, where selected midwives were trained to equip them with excellent standards of primary and secondary obstetric care. After this course these midwives were able to conduct procedures like forceps deliveries, vacuum extractions, and breech deliveries, as well as identifying mothers in low, moderate and high risk pregnancies and refer them to higher levels of care appropriately.

From this background, I was convinced of the necessity to conduct this study on the feasibility of integrating an advanced midwifery and neonatology Clinical Nurse Specialist, with the view of bringing about the desired impact on safe motherhood in Zambia.

Therefore there is need for integration of an advanced midwifery and neonatology Clinical Nurse Specialist in Zambian health care delivery system because, historically, nurses are responsible for the development and advancement of the nursing practice, the Clinical Nurse Specialist is regarded as the answer to providing this leadership.

According to Dewar, (1998) in a response to the workshop done in South Africa to see how a Clinical Nurse Specialist could be incorporated into the professional structure, a memorandum motivating for the introduction of the Clinical Nurse Specialist was drawn up and submitted to the South African Nursing Council. She strongly stresses the need to integrate Clinical Nurse Specialists into the health system.

Dowlin (2000) reports on a research done in Ireland, at the University College Hospital, where data revealed that Clinical Nurse Specialists were viewed as experts by nurses interviewed, and that the Clinical Nurse Specialists were best qualified to educate patients and staff. Most nurses welcomed the improvement in the patient care delivered by the Clinical Nurse Specialist.

On the other hand Mitchell-license Guyalt and Gordon (1998) reported on a controlled trial of nurse practitioners in Neonatal Intensive Care or nurse specialists. In that study a comparison was made on a Clinical Nurse Specialist neonatal practitioner team with a Pediatric Resident Doctors team in the delivery of Neonatal Intensive Care. The conclusion was that Clinical Nurse Specialists and Residents Doctors are similar with respect to all tested measures of performance.

These results support the use of Clinical Nurse Specialists in the neonatal Intensive Care Unit as an alternative to Pediatric Residents doctors in the delivery of care to critically ill neonates.

UNICEF (1994) argues the public sector's goal of reducing maternal mortality has not yet been accompanied by any clear policy or strategy for action, this is because the problem is not being addressed in a comprehensive co-coordinated manner and the concept of safe motherhood has not been institutionalized at any level of the public health system, especially at the district level where planning and implementation occur.

From observation it can be seen that there are gaps in the continuity of care in Zambia; those problems call for better integration of services and systems, multi-sectotorial collaboration and improvements in the decentralization process that was as part of the health sectors reforms.

This further indicates the importance of integrating the advanced midwifery and neonatology Clinical Nurse Specialist (CNS) who has the expertise of an educator, direct care giver, consultant, organizer and researcher into the District Health System.

1.2 PROBLEM STATEMENT

Previous research has shown that there is a problem in the delivery of quality care in maternity/maternal and child services in Zambia. According to the 1996 Zambia Demographic and Health Survey estimated maternal mortality rate is at 649 per 100,000 hospital births. According to UNICEF a situation Analysis of safe motherhood in Zambia the following are some of the causes of the high maternal mortality rates, human resource constraints and low number of supervised deliveries. This is due to the shortage of doctors and non availability of properly trained man power. Due to the above reasons, it becomes imperative to conduct a study into the feasibility of integrating advanced midwifery and neonatology clinical nurse specialist in the district health system in Zambia.

1.3 AIMS OF THE STUDY.



The aim of this study was to conduct an inquiry into the feasibility of the integration of advanced midwifery and neonatology Clinical Nurse Specialists in Ndola District Health System in Zambia, in order to improve on the delivery of quality care.

1.4 RESEARCH OBJECTIVES

- To determine the maternal and neonatal health care providers understanding of advanced midwifery and neonatology Clinical Nurse Specialist practice.
- To determine how maternal and neonatal caregivers perceive the integration of advance midwifery and neonatology Clinical Nurse Specialist in the health system as a whole.

1.5 RESEARCH QUESTIONS

- What do the maternal and Neonatal health care providers understand of the Advanced Midwifery and Neonatology Clinical Nurse Specialist?
- How do the Maternal and Neonatal health care providers perceive the integration of Advanced Midwifery and Neonatology Clinical Nurse specialist?

1.6 STUDY ASSUMPTION

It is assumed that there is a problem in the delivery of quality maternal and child care in Zambia because of the high maternal mortality rates. This has been attributed to human resource constraints and low number of supervised antenatal clinics, deliveries and postnatal clinics by skilled personnel among other reasons.

1.7 SIGNIFICANCE OF THE STUDY.

The rationale is that the information which will be analyzed from the maternal and neonatal care givers responses will contribute to the body and knowledge on the role and functions of the Advanced Midwifery and neonatology Clinical Nurse Specialists; as well as to show how the roles and functions will enhance the delivery of quality care within this particular field of nursing, and to inform the policy makers on these findings

1.8 METHODOLOGY.

A qualitative approach with two focus group discussions and one individual in depth interview as research methods were used. I collected date from three health care institutions i.e. The District Health System, The Children's hospital and The central Hospital. Semi-structured interview guides were used. Interviews were tape-recorded with the permission of the interviewees and subsequently transcribed.

1.9 DEFINITION OF OPERATIONAL TYERMS.

Clinical Nurse specialist (CNS): A nurse trained beyond the level of a nurse generalist in a particular field in a tertiary institution with a recognized program preferably at a Master's degree level.

Advanced Midwifery and Neonatology: A recognized program at a Master's degree level, specializing in antenatal, intranatal, and postnatal as well as in the care of the newborn.

Generic Roles: common characteristics found in a group defining their functions, in this case these include collaborating, teaching, clinical care, managing and research.

Health Reforms: The interventions put in place to improve on delivery of care after evaluation of the system and these can be in direct patient care, infrastructure or conditions of service.

Quality Care: Care which is cost effective with equity of access within acceptable standards as well as satisfies the client and realizes the objectives of the institution.

1.10 OUTLINE OF THE THESIS:

The current chapter sets out the background, aims and significance of the study.

Chapter two discuss a review of issues and studies found in the national and international literature on integration of the clinical nurse specialist in the health system, in particular advanced Midwifery and Neonatology clinical nurse specialists.

Chapter three discusses the research methodology and the research method is explained.

Chapter four includes presentation and discussion of results according to the themes that emerged during the interviews.

Chapter five conclusion and recommendations are given concerning the inquiry into the feasibility of integration of the CNS in the District Health System.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter, literature is reviewed. It considers the feasibility of integrating Advanced Midwifery and Neonatology CNS in the DH system in order to improve on the delivery of quality maternity services to reduce the maternal mortality rate. This has been discussed under the following sub headings:

- Evolvement of the clinical nurse specialist
- Generic roles of CNS
- Integration of CNS into the health system
- Maternity services

2.2 EVOLVEMENT OF THE CLINICAL NURSE SPECIALIST (CNS)

Specialization in nursing: Logic or chaos.

Snyder in Chaska. 1990. p. 107

Snyder in Chaska (1990) argues that nursing specialization came about because of the need to advance nursing knowledge and to improve quality of care. Specialization is actually the narrowing of the focus of concern within a discipline or profession; it is a mark of the advancement of a profession or discipline, in this case Advanced Midwifery and Neonatology CNS. Dewar (1998) alludes to the fact that nursing is a science and science is dynamic. She argues that in order to deliver quality care there is a need to move along in knowledge with the trends in the disease patterns and technology, since the body of nursing knowledge has expanded; the concept of CNS has gained increasing popularity.

Stanhope and Lancaster (1996) explains the fact that changes in the health care system and nursing have occurred in the past few decades because of a shift in societal demands and needs. Trends that have influenced the new roles of the clinical nurse specialist include improvement in technology, self-care, cost-containment measures, and accessibility to the client, third party reimbursement and demands for humanizing technological care.

Quaal (1999) says the CNS role originated in the 1940's with formalization in the 1950's via the work of people at Rutger's University in America. The main program goal was preparing an inpatient bedside nurse who would serve acutely ill patients via consultation and direct care. Other role components included educating patients, families and staff, supervision and research. The CNS was considered an expert clinician.

Williams cited in Twin, Roberts and Andrews (1996) argues that although the idea of nurses consulting experts outside their immediate work group, has been acknowledged in the United Kingdom since the 1980's the concept clinical nurse specialization has not been well developed. Due to the identified need for greater knowledge and clinical expertise in the domain of patient and client care that there is need for specialized nurse care. Williams alludes to the fact that in America, the CNS has studied at postgraduate level (Masters and Doctorate) and this is a primary criterion before being considered a CNS. On the contrary in the United Kingdom the formal entry to Nursing Specialist is located at a post registration level.

The International Council for nurses (1992) defines the CNS as

"a nurse prepared beyond the level of a nurse generalist and is authorized to practice as a specialist with advanced expertise in a branch of the nursing field".

2.3 GENERIC ROLES OF CLINICAL NURSE SPECIALIST

Humphries (1994) argues that clinical nurse specialists are a powerhouse for practice; their energy and drive provide a vital contribution to the quality and development of nursing practice, centered on the needs of the individual.

Amongst all CNS's, there are common areas of practice. In her presentation, Babich in Dewar (1998) identifies generic roles as competences that must be found in any CNS and these are: Direct patient care, education, consultation, management and research skills.

Williams in Twin et al. (1996) explains that becoming an expert through experience and a Clinical Nurse Specialist can be distinguished because the expert nurse uses analytical problem solving and underpins practice with detailed knowledge. A Clinical Nurse Specialist has more depth and breadth of knowledge, advanced clinical judgment and clinical expertise. This is evident in the judgment and decisions of both clinical and non-clinical variables.

A CNS is a change agent, collaborator, clinical leader, role model and a patient advocate. Post basic nursing education for specialty practice occurs in a formally recognized program of study, build upon the general education for the nurse and providing the content and experience to ensure competence in specialty practice (Humphries, 1994).

Snyder in Chaska (1990) points out that much diversity is found in areas of specialization. Before, the training focused more on proficiency as a practical nurse and not in development of knowledge within the discipline. Traditionally, specialization prepared nurses for functional roles in administration and education, these being the initial roles offered in educational institutions.

Humphries (1994) also alludes to this diversity in nursing specialization. The United Kingdom over the last decade has witnessed a major development and expansion in the number of CNSs. These posts are said to have developed across a wide range of practice areas with practitioners having a variety of levels of preparation resulting in a very diverse group.

Chaska (1990) further explains that specialization in nursing is usually conceptualized as occurring at the Master's level. Initial areas of specialization were psychiatric mental health nursing, medical-surgical nursing and pediatrics. Specialization can also be done in Sub-specialties according to disease entities like cardiovascular, geriatrics etc. It can also be specifically related to the community, for example, community health and midwifery.

According to Zuzelo (2003) the CNS is educated to assess, plan and evaluate patients, nursing personnel and organization network domains. The CNS typically affects patient care by intervening in complex cases, providing support to nursing staff members, consulting and participating in multi disciplinary activities, designing and evaluating programs of care and working on projects at the Unit, department division, institution or network levels. The CNS role is intended to improve patient care and influence others. Therefore, she suggests three types of influence for CNS practice are: Patients, nursing personnel and organizations/networks. To influence these particular individual and group stake holders, the CNS is required to develop a set of skill competencies that are unique to each sphere of influence.

According to Zuzelo, the statement on Clinical Nurse Specialist practice and education was the first attempt by a national CNS organization to articulate the competencies and outcomes unique to

CNS practice. Earlier CNS practice models were built on the concept of CNS sub-roles. The statement concerning the three spheres of influence was developed from feedback offered by practicing CNS, literature sources and CNS job descriptions.

2.3.1 COMPETENCES OF CNS AROUND THE THREE SPHERES OF INFLUENCE

(i) **PATIENTS SPHERE**

The fundamental sphere of CNS influence is the patient sphere. This particular sphere uses the nursing process of assessment, diagnostic, outcome identification, planning, intervention and evaluation.

The CNS integrates knowledge of disease and medical treatments in a holistic assessment of patients, while focusing on the differential diagnosis of illness experiences and wellness experiences that have non diseases-based etiologies and require nursing interventions to prevent, maintain or alleviate them.



The CNS designs, implements and evaluates population-based programs of care by integrating nursing interventions and medical treatments as appropriate, to enhance patient outcomes, in a cost effective manner (Zuzelo, 2003).

(ii) NURSING PERSONNEL SPHERE

According to Zuzelo (2003) the outcomes of CNS influence in the nursing personnel sphere include developing the knowledge and skills of nursing personnel and registered nurse practices,

Sharing research findings to promote evidence-based practice and articulating nursing contributions to patients care and nurse sensitive outcomes.

Additionally, CNS positively influences the expertise, self-efficacy and satisfaction of personnel. The competent CNS directly affects staff member retention and engages nursing personnel in learning activities that enhance the practice of nursing.

The CNS also affects the overall cost of care by encouraging the development of staff members who judiciously use resources while continuing to provide quality care to the patient.

Furthermore the CNS serves as a leader, consultant, mentor and change agent in advancing the practice of nursing to achieve quality, cost effective patient outcomes within the specialty population and as appropriate across populations.

(iii) ORGANIZATION NETWORK SPHERE

Clinical Nurse Specialist in the organization or network sphere of influence address problems, processes, strategies, policies, initiatives and programs in the larger context of the particular organization or network. CNS's use change strategies based on current theory and cutting-edge practices. They use best practices and benchmarking to develop models of care and they design and orchestrate continuous quality improvement activities.

CNS's play a vital role in keeping stakeholders informed and in touch with organizational concerns. They also align nursing initiatives and programs with the organizations' vision and mission. Competencies specific to the organization or network's sphere of influence include the ability to identify problems and opportunities. CNS must be able to assess organizations skillfully Within the larger context of the environment of care and need to accurately identify cultural discrepancies and relationship challenges that may affect the organization.

The CNS must be competent in identifying and articulating resource management needs and must contribute to the development of innovative solutions to organizational barriers. It is critical for the CNS to have competent evaluation skills and excellent interdisciplinary communication skills.

The stresses that the CNS must influence systems level policies that affect organizational outcomes. Creative and innovative problem solving skills are critical to influence the outcomes specific to this sphere. Additionally, CNS's must use these particular skills when evaluating the effects of programs; products, devices and patient care processes, using established, valid and reliable performance methodologies.

Zuzelo (2003) further argues that CNS may hold positions that do not have line authority. They may practice in settings in which they have accountability for outcomes without administrative authority. This presents unique challenges and requires the CNS to achieve outcomes through effective use of influence, by being specially trained and acquiring the professional attributes that

affect the three sphere of influence and these are, leadership, collaboration skills and conclusion skills.

2.4 INTEGRATION OF ADVANCED MIDWIFERY AND NEOTOLOGY IN THE HEALTH SYSTEM

According to Wilson and Metellam (1997), for integration to work, there should be dialogue, reassurance and in-service training for affected personnel. Continued support for specialised services should come from the primary or secondary referral levels of the health care system. The Integration process should also include human resource development through training and orientation. The relevant medical personnel should be trained to assume a wider range of responsibilities, skills and other required competencies for the provision of advanced midwifery and neonatology services.

The integration process is complex and it requires effective coordination and support for multiple and divers activities. WHO (2004) recommends that a mix of health professionals involved in the continuum of care needed by women and newborn babies on different levels of the health system will vary depending on the national or local structure of the health system and the respective skills and abilities of the health professional. In this particular joint statement by World Health Organisation (WHO), International Confederation of Midwives (ICM) and International Federation of Gynaecology (FGO), they continue to recommend that the role of each type of professional involved must be clearly defined within the strategy for the provision of skilled attendants. This will help to ensure teamwork and build trust and respect for each person's role in the provision of care.

In this regard the health professionals should develop a unified policy and joint action plan to work towards the establishment of national local quality standards of care for maternal and newborn health. This work must address not only the provision of but also the actions required to strengthen the health system, including working with the community and its traditional healers and Traditional birth attendants (TBAs), where they exist. It is important to encourage good collaboration and an unbroken chain of care between the community and the health system including referral between the different levels of care (WHO, 2004).

According to literature reviewed it is very difficult to come up with studies done on particular fields of specialization and their integration in the health system in this case advanced midwifery and neonatology. This is because of the generic roles that apply to all CNSs. Zuzelo (2003) also stresses that in 1995, the National association for CNSs was established as the national representative organization of CNSs regardless of practice area.

Before the National Association for CNS was formed, CNSs were represented by their speciality organizations. This led to a fragmented CNS voice at the national level. The association is said to be increasingly influential at local, state and national levels. Zuzelo alludes to the fact that there are competencies and outcomes unique to CNS practice. Earlier CNS practice models were built on the concept of sub-roles. The challenge associated with the sub-role paradigm is that many sub-roles overlap (Hamric and Spross, 1989).

Fitzpatrick (2002) confirms that the role of an advanced practice nurse (APN) has its unique components, whether the person will function as a Clinical Nurse Specialist, a Nurse Midwife, a Nurse Anesthetist or a Nurse Practitioner.

Quaal (1999) states that other role components include educating patients, families and staff as well supervision and research. The nurse practitioner role developed out of an acute shortage of physicians in the 1960's and 1970's.

In 1990, the American Nurse's Association (ANA) Council of Clinical Nurse Specialists and the Council of Primary Health Care Nurse Practitioners unanimously voted to combine the two councils in a step towards integration of the two historically separate roles (Wright, 1997).

The anticipated benefits for combining these two are:

- Potential gains of increased public and political acceptance for the CNS
- Enhanced educational credibility and a strengthened alliance with nursing for nurse practitioners
- Augmentation of political power by combining numbers
- Presentation of a united front
- Strengthening reimbursement potential
- Expanding role opportunities
- Decreasing territoriality within the profession

According to Wright (1997) a natural symbiosis exists between the CNS and the PN, and in fact makes the roles professionally indistinguishable as characterized by the level of required sophisticated knowledge and skills. Thus the natural attrition of these two roles seems appropriate for a merger of advanced practice.

Benner (1984) did a landmark research on clinical expertise that provides further justification for a merging of the desired elements. Making the model of advanced practice a more generic role, Benner described expert practice as:

"a hybrid of practical knowledge gained in front-line practice and the most sophisticated skills of knowledge utilization" (Benner, 1984. p.6).

Cronenwett (1992) argues that preparing an Advanced Practice Registered Nurse, as one educational product would afford greater marketability in a diversity of roles. Therefore there is no need to continue with the traditional CNS role in an environment that had converted to APRN model, festered by legislative and institutional changes. It is in this regard that in 1998 a legislation that changed the Nurse Practice Act to reflect a generic APRN was passed in America. It is with the foregoing that I will discuss integration of the CNS/APRN in my literature review to show the outcome of integration in other countries.

2.5 INTEGRATION OF ADVANCED MIDWIFERY AND NEONATOLOGY CNS IN THE HEALTH SYSTEM: THE BENEFITS

According to the American Academy of Pediatrics (2003), the advanced practice neonatal nurse's participation in newborn care continues to be accepted and supported. Recognized categories of advanced practice neonatal nurse are the neonatal clinical nurse specialist and neonatal nurse practitioner, as long as the training and credentialing requirements have been updated recently and are endorsed.

These are registered nurses with clinical expertise in neonatal nursing that have obtained a Master's degree or have completed an educational program of study and supervised practice beyond the level of basic nursing in the newborns and their families.

The NNP manages a caseload of neonatal patients with consultation, collaboration and medical supervision by a physician using the acquired knowledge of path physiology, pharmacology and physiology. The NNP may exercise independent judgment in the assessment and diagnosis of infants and in the performance of certain delegated procedures. As an APRN, the NNP is also involved in education, consultation and research (Maternal Association of Neonatal Nurses, 2002).

According to a controlled trial of nurse practitioners in neonatal intensive care in the Mc Master division of Hospitals (Hamilton, Ontario, Canada) (American Academy of Pediatrics, (1996).

Nurse Practitioners appear to provide care in newborn intensive care units equivalent to that of Paediatric Residents. This has important implications given the declining number of Residents and the increasing number of premature acutely ill infants. Researchers randomly assigned 821 infants admitted to the Neonatal Intensive Care Unit (NICU) to conventional daytime care by Pediatric Residents or daytime care by Nurse Practitioners. Pediatric Residents supervised care for all infants at night. No differences were found in death rates, complication rates, average length of stay, parental satisfaction with care, percentage of infants with developmental delay or cost of care.



The background to the NICU trial was that the increased survival rates of extremely low birth weight infants, the shortage of physicians in the neonatal intensive care unit (NICU) and the nursing profession's emphasis on development of advanced nursing practice roles have provided an opportunity to introduce Clinical Nurse Specialists/Neonatal Practitioners (CNS/NP's) into tertiary care neonatal setting in Ontario, Canada since 1985 (Paes & Mitchell, 1989) (Hunsberger et al., 1992).

The objective of the study was to compare a Clinical Nurse Specialist/ Neonatal Practitioner (CNP/NP) team with a Pediatric Resident team, in the delivery of neonatal intensive care. A randomized controlled trial was done and the setting was a 33-bed, tertiary level, neonatal intensive care unit. Patients of 821 infants admitted to the neonatal intensive care unit between September 1991 and September 1992 were identified. 414 were randomized to care by the CNS/NP team and 407 were randomized to care by the Pediatric Resident team.

Neonatologists supervised both teams. Outcome measures included: mortality, number of neonatal complications, length of stay, and quality of care as assessed by a quantitative indicator condition

approach. Parent satisfaction with care was measured using the neonatal index of parent satisfaction; long-term outcomes were measured using the Minnesota Infant Development Inventory and Costs (American Academy of Pediatrics, 1996). Consequently, the result of the study is in favour of integration of advanced Pediatric Nursing Practice in the care of the newborn in order to complement the shortage or absence of resident medical officers.

Christian (1996) presents the role of advanced nurses as change agents in the clinical setting. Christian gives a report on the co-ordination and integration of CNS, citing the Harris Health Home prenatal and neonatal CNS, and the Harris Hospital prenatal and neonatal CNS, develops rapport and respect for each other's roles, as they share in care of a mother or infant.

The CNSs as program directors use advanced knowledge and skills to act as educators, researchers, and consultant and change agents for a new program to promote the health of these specific populations. Christian continues to say in this particular program it was found that the home care community program reduced medical facility utilization in length of stay in the intensive care unit, cutting down costs for both the family and the hospital. There were no reported visits to the physicians' office for minor illnesses reducing on junior doctors' hours. This home care program appeared to improve the health of infants and their families.

The maternal child CNS in this program conducted visits on high risk pregnant women in order to manage the patients in the disease process or problem, in order to decrease or limit symptoms and promote a term pregnancy with as few complications as possible. Broten and colleagues (1989) did a study in which clinical nurse specialists were found to be effective in discharge teaching and home follow ups.

According to the American Journal of Public Health (2004) the maternal mortality rate in Sweden in the early 20th century was one third of that in the United States. This rate was recognized by American visitors as an achievement of Swedish maternal care. This achievement was helped along by The National Health Strategy who gave midwives and doctors complementary roles in maternity care as well as equal involvement in setting public health policy, also highly competent midwives offering home deliveries helped the decline.

According to Hogberg, (1986) the impact of midwife-assisted delivery on maternal and child outcome is of major historical interest. At the beginning of the 19th century, almost 40% of deliveries were attended by licensed highly competent midwives, while only a very small fraction of women gave birth in a lying in hospital. By the end of the 19th century, a licensed highly competent midwife attended 78% of the deliveries, while 2.8% gave birth in lying in hospitals.

The mean annual number of deliveries per midwife in the rural areas was 37 during the second half of the 19th century. The highly competent midwives used forceps in only 1 of 133-180 deliveries with a case of fatality of 27 to 29 deaths per 1 000 operations. The non-septic maternal mortality was reduced form 414 per 100,000 live births to 122 per 100,000.

On the Southern African scenario, the evolvement of the clinical nurse specialist has taken in several sub-specialties including Advanced Midwifery and Neonatology Clinical Nurse Specialist. Issues on integration are still being pursued.

In South Africa, Dewar (1998) reports on a seminar/ workshop proceeding in which the integration of various Clinical Nurse Specialists was discussed and a document or memorandum on the integration of CNS into the Health System was presented to the South African Nursing Council. In a study conducted by Roels (1996) the CNS Advanced Midwifery and Neonatology is found to be under-utilized with regard to her specialized skills. According to the research, the extent of her

knowledge and skills is unknown to the doctors and the professional community. This causes confusion, conflict and limitation of her clinical practice.

It was the purpose of the study conducted by Roels to identify and describe the expectations and functions of the Clinical Nurse Specialist in midwifery and Neonatology with the aim of formulating directives/ recommendations for the scope of practice within the South African context. An investigative and descriptive approach was followed during a contextual study to determine the expectations of the professional community, doctors, training institutions and the CNS.

Roels used a qualitative approach of a focus group interview conducted with experts in midwifery units to determine the functions of the Clinical Nurse Specialist. A questionnaire on the activities and functions of the CNS was compiled from information gained during these interviews. The sample was extended to registered nurses and medical practitioners in South Africa to determine their expectations of the CNS in midwifery.

A comparison was made between the existing scope of practice of the midwife, the expectations of the professional community, doctor and the training institutions and expectations of the CNS in midwifery and Neonatology within the context of prenatal health care. The results of the study by Roels which were under utilization, confusion and conflict in the role and function of a CNS within the health system revealed that there was need to inquire into feasibility of integration of Advanced Midwifery and Neonatology CNS in the health system.

2.6 MATERNAL AND CHILD HEALTH SERVICES

The focus of this study is an inquiry into the feasibility of integration of Advanced Midwifery and Neonatology Clinical Nurse Specialist in the District Health System. This means that the interventions of quality care begin at the primary health care level. Quaal (1999) alludes to the fact that the CNS or Advanced Practice Registered Nurse (APRN) provides primary health care to patients in diverse settings while focusing on health promotion, disease prevention, health maintenance, illness and disability minimization.

Effective utilization of APRNs in the provision of primary health care services is a critical component in the mission to provide primary care in a seamless system across a continuum of care.

Hamric (1989) further argues that primary health care is the provision of comprehensive coordinated continuous accessible health care services by clinicians who are accountable for addressing a large majority of health care needs. WHO (2004) recommends that a childbearing woman needs a continuum of care that will ensure the best possible health outcome for them and their newborns. The continuum starts with the woman and her family in the woman's home i.e. self-care and prevention. It is followed by the first level of health care (at a health care center, clinic or in the client's home) and involves the provision of high quality midwifery care. The care will continue at the first level at the first level in cases in which the pregnancy, birth and postnatal remain free from complications.

However when complications occur, women and their newborns will need care of secondary or tertiary levels of the health system depending on the seriousness of their respective conditions. According to WHO the successful provision of the continuum of care requires a functioning health care system with the necessary infrastructure in place including transport between the primary level of health care and referral clinics and hospitals.

It also needs effective, efficient and predictive collaboration between all those involved in the provision of care to pregnant women and newborns.

The skilled attendant is at the center of the continuum of care. According to WHO,

"A skilled attendant is an accredited health professional- such as a midwife, doctor or nursewho has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, child birth and the immediate hospital period and the identification, management and referral of complications in women and newborns" (WHO 200)

At the primary health care level the skilled attendant will need to work with other care providers in the community such as traditional birth attendants and social workers. She /he will also need strong working links with health care providers at the secondary and tertiary levels of the health system.

Recognizing the pivotal role of the skilled attendant in reducing the rising maternal and newborn mortality and morbidity especially in developing countries, the World Health Organisation (WHO), the International Confederation of Midwives (ICM) and the International Federation of Gynaecology and Obstetrics (FIGO), in a joint statement undertook to work together to increase access to skilled attendants for all women and newborns in pregnancy, childbirth and the immediate postnatal period. The three organizations will urge governments, policy-makers, health care providers, donors and communities to increase access of childbearing women and their families to a continuum of skilled care. (WHO, 2004).

Health systems are being reformed and strengthened in many developing countries, WHO, ICM and FIGO believe that this is an opportune moment to strengthen the case for skilled attendants

with a view to ensuring that this vital function is institutionalized in the newly reformed developing health systems (WHO, 2004).

The vision of the health reforms in Zambia is to "provide equity of access to cost-effective, quality health care as close to the family as possible". The strategy adopted to achieve this vision includes an emphasis on the integrated delivery of cost-effective interventions that address the vast majority of health problems affecting the Zambian population. By decentralizing and integrating services and by shifting the emphasis to health center and community level interventions, it is expected that costs may be contained while improving accessibility and quality of care (Central Board of Health, Zambia. 2000).

The above strategy adopted to achieve the Ministry of health vision in Zambia, led the researcher to do a study in the feasibility of integration of advanced midwifery and Neonatology CNS in order to improve on the delivery of quality maternity services in the hoping of helping to bring down the rising maternal death rate.

2.7 CONCLUSION



The literature shows that a lot of research has been done on the function of CNS's and their role, Including integration and the problems encountered with the overlapping of generic roles with the Nurse Practitioner's (NP's) hence the evolvement of the Advanced Practitioner Registered Nurse (APRN) role.

Studies show positive outcomes to maternal and child health care with integration of CNS advanced Midwifery and Neonatology. There is therefore a need to do a study in the feasibility of integration of this CNS in the District Health System context where maternal and child health services are not satisfactory.

CHAPTER 3

RESEARCH AND METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methodology of the present study. The research design, methods and analysis are described. The chapter ends with a discussion on how ethics were applied whilst conducting the study.

3.2 RESEARCH DESIGN

The purpose of this study was to inquire on the feasibility of the integration of advanced midwifery and neonatology CNS in the District Health System. The qualitative approach was used aimed at eliciting in- depth information. According to Paraho, (1999), the value of qualitative methods lies in their ability to purse systematically the kinds of research questions that are not people's perceptions, providing the flexible approach needed to allow for discovery of the unexpected and to enable the in-depth investigation of particular topics. These methods are characterized by an approach that seeks to describe and analyse the culture and behavior of humans and their groupings, from the point of view of those being studied (Mouton, 2001). They also seek to find the meaning.

Of behaviors and places emphasis on providing an events and behaviors rather than investigating knowledge or measuring comprehensive or holistic understanding of the social setting in which research is conducted (Roper, and Shapira, 2000).

This approach allows the discovery of new issues instead of the researcher being limited to a predefined set of questions. In qualitative research, initial choices are made concerning research questions and data collection methods, but these may be modified as new information is collected. This is different from quantitative research where all procedures must be specified before the beginning of data collection and followed as an unalterable course (Polit, Beck, and Hungler, 2001).

Qualitative designs remain flexible, continuously integrating newly acquired insights into one with midwives and, individual interviews with 2 key informants were conducted in order for the researcher to obtain the viewpoints of a homogenous group of people who are said to complement each other. There by allowing for more interaction and eliciting of more in-depth information on their perceptions, opinions and concerns on the topic (Bloor, Frankland, Thomas and Roson, 2001).

3.3 RESEARCH METHOD

A qualitative interpretative study was conducted, aimed at eliciting in-depth information. In-depth interview and focus group discussions were conducted with key informants involved in the delivery of maternal and childcare services in the district health system. These informants were:

- Doctors, one focus group discussion was conducted
- Nursing services managers for the District, Ndola Central Hospital and Arthur Davison Children's Hospital, and a Deputy Registrar of the General Nursing Council of Zambia were the key informants in an in depth individual interview.
- Nursing officers and registered midwives, one focus group discussion was conducted.

The technique I adopted was the face-to-face dialogue interviewing and the focus group interviews. These techniques were appropriate for the research questions. It allowed me to find out the concerns related to matters of perceptions, values and other human characteristics as well as situational factors concerning the feasibility of integration of Advanced Midwifery and Neonatology Clinical Nurse Specialists in the Ndola District Health System, through in-depth interviews conducted with key informants.

3.4 RESEARCH SETTING

The District Health Management Board manages 18 clinics in the District. They are located in various townships/compounds where basic curative and preventive services are provided. Laboratory facilities are available at 3 clinics. Out of the 18 clinics, 5 offer 24-hour delivery service. The District also has two hospitals (one Paediatric and one Hospital).

Other facilities are:

• 27 Company clinics and private surgeries offering curative services.

- Army clinics offering preventive and curative services.
- 1 Research center
- 1Diagnostic center
- Clinics run by the Mining Industry offering preventive and curative services.

At community level there are 137 traditional healers, 63 Community Health Workers (CHWS), 51 trained Traditional Birth attendants (TBA's) and 69 Community Based care helpers. Then 144 Health Neighborhood Committees (HNC) out of which 57 are very active. The Ndola District Health Management Team Clinics utilize the services of clinical officers and nurse midwives. Medical doctors may visit the clinics once or twice a week depending on the workload at each clinic.

Five ambulances serve the 18 clinics with an extensive radio communication connecting the clinics, the ambulance and the hospital.

The rationale for the choice of Ndola District System for this study was that it has existing facilities for Maternal and Child Health Services, staffed by Clinical officers, Nurse midwives and visiting Doctors. It provides a natural setting to find out the feelings and perceptions of the population concerned on the integration of Advanced Midwifery and Neonatology Clinical Nurse Specialist (CNS) who is trained and prepared beyond a Nurse midwife.

3.5 PARTICIPANTS AND SAMPLING

The study used the methods of focus group discussions with 2 different groups and 2 individual in depth interviews with key informants, the Nursing Services Manager and the Deputy Registrar of the general nursing Council. Doctors and Nurse midwives were sampled purposively. According to Bloor, et al (2001); Stewart and Shamdasani (1990) purposive sampling the researcher, is able to find ways of obtaining participants that represent all the important sub-groups of the population by targeting specific sectors because they represent an important tool of discovery and exploration, when little is known about a particular subject or certain phenomenon. In this case the feasibility of integration of Advanced Midwifery and Neonatology Clinical Nurse Specialist in Ndola District Health System was the phenomenon under study.

According to Bloor, Frankland, Thomas, and Robson (2001), purposive or theoretical sampling can be used where researchers can be guided by their particular research questions and key characteristics that are considered relevant and individuals recruited accordingly.

Bloor, M.et al. (2001), recommends groups consisting of between six and eight participants as the optimum size focus group discussion. Furthermore, Stewart and Shamdasani (1990), say that there are no general rules concerning the optimal number of groups, in other words, when the research is very complex or when numerous different types of individuals are of interest, more focus groups will be required. Fewer than 6 participants makes for a rather dull discussion and more than 12 participants will be difficult for the researcher to manage.

3.5.1 SAMPLE SIZE

In this study, 2 focus groups were conducted, one focus group consisted of 6 doctors in order to maintain compatibility because highly compatible groups perform their tasks more effectively than less compatible groups (Stewart and Shamdasani, 1990).

A second focus group consisted of 8 nurse midwives practicing experience of 2 years or more in maternity services, this group included nursing officers since they make proposals to the nursing services managers for staffing requirements. The discussion included the perceptions on the integration of Advanced Midwifery and Neonatology Clinical Nurse Specialist (CNS) in Ndola District Health System as well as the understanding of the participants of an advanced midwifery and neonatology CNS.

Individual key informants like the Nursing Services Managers and the Deputy Registrar for the General Nursing Council of Zambia were interviewed as well. The interviews lasted 30minutes for individual interviews and 60 to 90 minutes for focus group discussions. The details on the demo graphs of the participants are in Annexure A and B.

3.6 PROCEDURE

The researcher got permission from the executive Directors of the District Health Department, the Pediatrics hospitals and Ndola Central Hospital to conduct the study within the District. This was done

verbally and by presenting a letter of permission to do the study from the University of the Western Cape. I visited all three institutions to meet with the potential participants to request for their voluntary participation from them. Letters of invitation and consent were delivered to the selected participants. For the Doctors, the discussions were conducted in the Hospital School, which is very quiet and has minimal disturbances. Chairs were arranged in a semi-circle to avoid barriers and thus make the group more interactive. The Nurse's discussions were also conducted in the boardroom that was also quiet and comfortable. Chairs had to be arranged in a semi-circle and tables removed that would act as barriers. The researcher facilitated the groups; the assistant was an observer and took down notes whiles the session was in progress in order not to miss out any expressions or nauseas.

The discussions were tape-recorded with the permission from the participants and the tapes, were subsequently transcribed. In depth questions were used to elicit information from the individual interviews, whilst a semi-structured interview guide was used to guide the focus group discussions in order to allow the researcher to probe the respondents in order to elicit more information. This also enables the participants to talk about their perceptions concerning the feasibility of integrating Advanced Midwifery and Neonatology CNS in Ndola District Health System.

3.7 DATA ANALYSIS

Data analysis was undertaken concurrently with data collection (Silverman, 1993, Hammersby and Atkison, 1995). Following each focus group, the researcher and the assistant met to 'debrief' in order to compare observations (Morgan and Kruger, 1998). Debriefing notes, together with

Transcriptions of focus groups discussions and interviews were then analyzed using a form of thematic analysis (Hammersby and Atkison, 1995; Coffey and Atkison, 1996). Transcriptions and field notes were read and coded manually. These codes were then interlinked using a mind – mapping approach. This visual display facilitated identification of key concepts and the relationships between them. The transcripts were then re-read to ensure that all the original codes were covered by the wider categories. The coded data was re-contextualised according to thematically based files and explored again. This time with interpretation in mind, looking for patterns and meanings in relation to the two specific objectives.

• To determine the doctors and midwives understanding of advanced midwifery and neonatology Clinical Nurse Specialist practice.

• To determine how midwives and doctors perceive the integration of advanced midwifery and neonatology Clinical Nurse Specialist in the District Health System.

It turned out that some of the themes were more relevant than the others. However, the less relevant themes remain an important contextual background for understanding the views of the participants and the frames of reference, which emerged (Silverman, 1993, Bryman, 2001). The search for such themes and the peer validation provided by the research supervisor throughout the data analysis enhanced the trustworthiness of the findings (Lincoln and Geba, 1985).

3.8 RELIABILITY AND VALIDITY

Methods for establishing reliability and validity in qualitative research differ from those used in quantitative research. The terms reliability and validity, are replaced by consistency, dependability, conformability, audibility, recurrent patterning, credibility, trustworthiness and transferability when referring to reliability and validity (Polit, Beck and Hungler, 2001). Therefore, this study used criteria such as credibility, transferability and conformability to establish trustworthiness.

3.8.1 CREDIBILITY

In qualitative research, credibility refers to internal validity. The technique used to achieve credibility includes using a variety of sources in data gathering (triangulation) and having research participants or fellow researchers review, validate and verify the researcher's interpretation and conclusion. In this study this was applied by allowing the research assistant to listen to the radio taped information and verify the researcher's interpretation. The research and the research assistant, who is a postgraduate midwifery tutor, then listened to the audio taped information and transcribed it verbatim.

3.8.2 TRANSFERABILITY

External validity, defined as the degree to which the results of a study can be generalized to setting or samples other than the ones studied is, usually referred to as transferability. In this regard the researcher kept the evidence/data that was gathered through tapes, observational notes, methodological

notes and analytical notes. So that every interested researcher can access the information to make generalization in his/her own context.

3.8.3 CONFIRMABILITY

Conformability implies the repeated affirmation of what the researcher has heard, seen or experienced during the research process. The method of analysis by the researcher was based on thematic content analysis. The researcher listened to the recorded session immediately after the group discussions and noted emerging topics, the body language of the participants and general impressions of the group discussions. The transcribed tape recordings were then read and re-read and general themes written down. Trough discussion with the research assistant, a final list of categories and themes were compiled. Data was then discussed under these categories.

3.8.4 TRIANGULATION

Triangulation serves as a means of assessing the validity of findings. Methodological triangulation was done on focus group discussions, one for doctors and one for midwives, using a semi-structured openended schedule formulated with the help of the literature reviewed.

The Deputy Registrar of the General Nursing Council of Zambia was also interviewed on the feasibility of integrating Advanced Midwifery and Neonatology CNS in the health system. The General Nursing council is the regulatory body for delivery of quality nursing care in Zambia, so it was very important to get information on the feasibility of integration of the CNS in the health system. Information gathered was compared between these key informants (Polit, F.B. *et al.* 2001). The nursing service managers for the 3 district health care institutions were also interviewed in their capacity as policy makers for nursing services.

3.9 ETHICAL CONSIDERATIONS

Approval was sought from the University of the Western Cape Senate, Ndola District Health Management Team, Ndola Central Hospital and Arthur Davison Children's Hospital executive Directors before commencement of the study. Participants were given letters of invitation six weeks before the focus group discussion to give them time to consider the purpose of the study and their participation. Their selection criterion was also explained and the fact that their participation was voluntary and they were given the choice to withdraw if they so wished. The participants were assured of anonymity; names were not used but numbers. Confidentiality was also ensured as the researcher told the participants that the information obtained was only going to be for research purposes. The consent form and letter asking for permission is on Appendices, C and D.

3.10 CONCLUSION

In this chapter the methodology used for the study has been explain. Focusing on the qualitative research paradigm using focus group discussions and in depth interviews. The participants and sampling design data collection technique for focus groups were addressed. The reliability and validity of the data collection instruments and analysis were substantiated. The next chapter deals with the presentation of findings obtained through focus group discussions.



CHAPTER 4

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

In this chapter the qualitative responses from the doctors, nurse midwives, the nursing service manager and the Deputy Registrar of the General Nursing Council of Zambia are presented. The excerpts from the participations are presented in terms of each participant's interpretation of his or her perception of the feasibility of Integration of Advanced midwifery and Neonatology CNS in the District Health System. This is followed by the researcher's interpretation of the transcripts relative to the research question. The data analysis and discussions are presented according to themes that emerged during both focus groups discussions with doctors and nurses. The interview results are discussed separately from the focus group results.

The themes have been clustered into three main groups:

- Organization Structure where to place the CNS
- Roles and Competences of the CNS
- Retentions and Sustainability of the CNS within the health system

4.2 ORGANIZATION STRUCTURE: WHERE TO PLACE THE CNS

The participants in both the doctors and nurses focus group discussions felt the integration was good, but the problem was, where to place the CNS within the District Health System. The Doctor's felt that the best level would be the rural health centers or Primary Health care centers, because if placed at the District or hospital level the doctors are already there and if so Where would the doctors be? The nurses felt that the Primary setting would be ideal except that the infrastructure and equipment for CMS to perform according to her/his expertise are not available.

4.2.1 PLACEMENT WITHIN THE DISTRICT HEALTH SYSTEM

The doctors and nurses felt that the CNS would be best placed at the rural health center or Primary Health Center where there are no doctors.

Doctor: ... In the first place, where do we integrate the specialist? I think according to our set up here, consultants and obstetricians are based in urban areas; she/he will have much to do at a rural set up.

Nurse: ... As for now, there are few doctors indeed in the community and rural areas that is where we need that type of specialist.

The statements above are in line with WHOs' recommendations concerning the placements of skilled attendants in order to improve on the high maternal mortality rate. A child bearing women must have contact with a skilled attendants at the lowest level of care, who will be able to treat cases which are not complicated, educate the women and identify and refer the complicated cases in time which will avert unnecessary delays and improve on morbidity and mortality rates.

WHO, (2004) in a joint statement with ICM and FIGO, recommended that in order to reduce maternal mortality rates, child bearing women need a continuum of care to ensure the best possible health outcome for them and their newborns. The continuum starts with the woman and her family in the woman's home i.e. self-care and prevention and it involves the provision of high quality midwifery care. This continues at the first level in cases in which the pregnancy, birth and postnatal period remain free from complications. However, when complications occur, women and /or their newborns will need the care of secondary or tertiary levels of the health system depending on the seriousness of their respective condition (WHO, 2004).

The integrations at Primary Health care level is further supported by (Quaal, 1999) who support the argument that CNS or APRNS provide Primary Health Care to patients in diverse settings focusing on health promotion, disease prevention, health maintenance, illness and disability minimization. Effective utilization of CNS in the provision of Primary Health Care services is a critical component in the mission of providing Primary Health Care services in a seamless system across a continuum of care.

Christian also endorses the benefits of the integration of a CNS on the delivery of quality maternity care at primary health care level. According to the results of the study highlighted on by Christian revealed that after the integration of the CNS the costs for both the hospital and families were cut down, because medical facility utilization was reduced in the length of stay in the intensive care unit

by the patients because the CNS was able to follow the patients up in their homes after early discharge. Junior doctors hours were reduced because the CNS was able to handle the minor illness. These findings support the feelings of the doctors and nurses that the CNS would be more effective if integrated at the primary health care level (Christian, 1996).

4.2.2 DOCTORS FELT THREATENED

Doctors felt that their positions were threatened if the CNS with all her specialist skills was integrated at the District level or in hospitals. They wondered where their place as doctors would be

Doctor... This person will be highly, highly, highly qualified if we integrate this person at the District. What will our place as doctors be? ... Here she will be doing the same job an obstetrician. ... As doctors, we may feel part of our job is being taken away.

The doctors' fears are common to the fears, which have been expressed elsewhere by doctors. This is confirmed in the following literature reviewed. Parish, 2003, supports the argument of doctors fears by the fact that while the numbers of CNS are increasing resulting in the improvement of care to specific groups of patients, the development of such roles should not threaten the competence of or the skill other professionals like doctors and generalist nurses, but rather increase on the skill using the CNS role of education. On the other hand literature has shown that doctors view nurse practitioners as rivals, reducing their patient turnover and gaining more popularity. However, nurse practitioners see themselves and doctors as 'interdependent' and scoff at physicians who view nurse practitioners as rivals (Slomski, 2000).

Studies have shown that CNS and doctors complement each other's roles in that CNS have the same outcomes in the delivery of care thus filling in the junior doctors gaps and reducing on junior doctor's hours. A study on controlled trial of nurse practitioners or CNS in neonatal Intensive Care in Minnesota, Canada revealed that nurse practitioners appear to provide care in newborn Intensive Care Units equivalent to that of Pediatric Residents. This was said to have important implications, given the declining number of residents (Mitchell-License, et al, 1996).

Placement of CNS, within the structure, was viewed not to be a problem, as long as the level of involvement and her roles are clearly defined so that neither doctors nor nurses feel displaced.

4.2.3 STRUCTURE AND EQUIPMENT

The doctors and nurses expressed their concern about insufficient infrastructure at the rural clinics are not conducive, for the integration of the CNS at this level to succeed. They advocated on the need to improve on infrastructure in terms of buildings, communication and transportation. This includes buying the necessary equipment to enable the CNS to provide the skilled care like vacuum extractions.

Nurse... if integrated at the rural health center, the objectives will not be met because of the poor infrastructure and the non-availability of specialized equipment.

Nurse... I have looked at some of the procedures that the CNS does, like forceps delivery, vacuum extractions. If you look at the infrastructure in the clinics, it is not conducive. The specialized equipment like cardiac monitors are not available, so if placed in the rural health center, her/his skills will be waste.



On the other hand, one participant felt that. ... Once placed at a health center as a specialist, she can advocate for the needed equipment, which will eventually be bought.

The participants felt strongly that in order for the integration to be successful there is a need to have a functioning health system structure. This is supported by WHO, (2004), which recommends that the successful provision of the continuum of care requires a functioning health care system with the necessary infrastructure in place. Therefore all those involved in the provision of care to pregnant women and newborns must ensure that the required supplies of essential medicines and equipment are available. Including suitable buildings, enough staff, the right mixture of professional skills, as well as effective, efficient and pro-active collaboration between all those involved in the provision of care to pregnant and newborns. With the skilled attendant is at the center of the continuum of care. At the Primary Health Care level, he/she will need to work with other care providers in the community in order to meet the objective on reduction of maternal mortality rate by providing quality care.

4.3 ROLES AND COMPETENCES

Both the doctors and nurses felt that the integration would be beneficial because of the various roles that the CNS has. The CNS will be able o give advice as a consultant to other nurses and be a roles model, administrator, direct caregiver, researcher and do networking.

4.3.1 ADMINISTRATIVE ROLE

The nurses were of the view that the CNS can be placed at an administrative level to oversee the clinics. They also were of the opinion that she/he would be more influential if she is placed on an administrative level.

Nurses... But at the same time I feel she can be a link partly if she is in an administrative position and in the clinical area because for her to do staff development She needs to plan and to have a clear picture of what is happening around and even above her. ... She can be in administrative but given days to be in the various clinics to give her views... In my view I will say that she can be put as the overall boss of the clinics as well as the hospital.

Literature supports these sentiments by the nurses. The generic roles of a CNS equip her with he skill of an administrator, therefore at the administrative level the CNS will collaborate with nurse managers to develop policies, procedures, standards of care, hiring of staff and overall administration of the critical units. The CNS will support nursing administration through quality assurance activities, new and ongoing programs development and resolution of issues related to the advanced midwifery and neonatology patient population in this case (Quaal, 1999).

4.3.2 CONSULTATION AND MENTORING ROLE

The doctors felt that integration of this caliber of nurses would be like responding to a need to the general shortage of health workers. It would also work to the advantage of the nurses who would have another nurse to consult before calling on the doctor. This may reduce on unnecessary nurse to doctor referrals.

They also wondered whether as a CNS one could train others because training abroad is expensive. In order to accomplish the objective of integrating a CNS there is need to broaden the integration since nurses manage most maternity services in the country.

Doctors: ... If there is a problem, a nurse has to consult a Clinical Nurse Specialist then, if she has difficulties, a doctor or consultant obstetrician is informed. After your training, are you going to train more specialists? ... You really have to become a specialist and be a consultant in one area so that you are able to give direction to others more effectively.

It came strongly that the role of a consultant for a CNS is recognized as well as that of her/him being a trainer or mentor. Quaal (1999) supports these findings that the CNS' role is to provide consultation on midwifery and neonatology patient care to staff nurses, house staff, attending physicians and allied health personnel. In addition She also provides consultation to the employee wellness program.



4.3.3 DIRECT CARE GIVER ROLE

Both focus groups felt that this role must have a clear have a clear division in order to avoid confusion in the delivery of care the role of the CNS and that of the doctors must be clearly spelt out. They also strongly pointed out that in order to maximize on this particular role, only nurses with a midwifery background must do this training.

They also felt that the program must be separated into a major in midwifery and the other in neonatology to make it more manageable.

Doctors ... I think it is an all- inclusive kind of care for the patient, antenatal, post-natal, intranatal but what I would like to find out is where the division really is... Why not have a midwife specially trained in neonatology and another in midwifery in order for one to perform to the best of her capabilities. You must get a midwife with the necessary experience to train further. ...Ndola Central Hospital has no neonatology unit but if we have this CNS who is able to take care of the newborn then that will be better. The statements above on the clinical role of the CNS reveal that the CNS must have the background of midwifery prior to training as a clinical nurse specialist. They feel that to be more effective, this specialist training must be subdivided into Advanced Midwifery and Advanced Neonatology. These findings are backed by the International Council of Nurses 1992, who recommends that a nurse specialist is prepared beyond the level of a nurse generalist in one branch of nursing and is authorized to practice as a specialist with advanced expertise in a particular branch of the nursing field in this case Advanced Midwifery and Neonatology. On the other hand, Roets (1996) found that the CNS in Advanced Midwifery and Neonatology is often under utilized with regards to her specialized clinical skills. This is because the extent of the knowledge and skills is unknown to the doctors and the professional community and causes confusions it is recommended that the role theory be applied when integrating those identified within the CNS role set must be consulted and involved incoming up with a statement of their role. This process provides an opportunity to establish wider and clearer understanding of the role, with those with whom the CNS interacts (Hamric & Spross, 1989).

The statement on the need to need to subdivide the specialty in two i.e. Advanced Midwifery and Advanced Neonatology correlates with most of the studies. The specialties are often discussed separately. Mitchell- Dicence, et al., (1996) discusses a controlled trial of advanced neonatal nurse practitioners in a Neonatal Intensive Care Unit in Canada. On the other hand Christian, (19960) presents the role of advanced nurses in prenatal care as change agents in the clinical setting using the prenatal CNS and neonatal CNS.

4.3.4 RESEARCH AND NETWORKING ROLE

The nurses felt that the CNS can be a link; she can advocate for needed equipment, she will give her views on the delivery of care. In order to do staff development she needs to needs to know what is happening around her above her.

Nurses. ... But at the same time I felt she could be a link partly. She needs to plan to have a clear picture of what is happening around and even above her. She can be given days to be in the various clinics to give her views. ...She can advocate for the needed equipment.

The role of net working, advocacy and collaboration is empathized on in the statements above by collaborating, networking and researching the CNS will be able to plan, and give new views.

Zuzelo, (2003) argues that Clinical Nurse Specialists need not hold positions that have line authority. They may practice in settings in which they have accountability for outcomes without administrative authority. This presents unique challenges and requires the CNS to achieve outcomes through the effective use of the various levels of influence. These are patient's sphere, nursing personnel sphere and organizational network sphere. Maternity service settings provide CNS with diverse and challenging opportunities for the CNS to affect patients, nursing personnel and other health care providers and organization.

Improving patient outcomes and positively affecting the costs services is paramount to the CNS practice. Therefore to effectively influence outcomes, the CNS needs to develop the attributes of a professional and acquire skills in leadership, collaboration (Quaal, 1999).

4.3.5 RETENTION AND SUSTAINABILITY WITHIN THE SYSTEM

Both focus groups expressed their views that in order for integration to work, there was a need to train the CNS locally in Zambia and a need to recognize the CNS as a senior member of staff on the hierarchy of the health system and improvement in the deplorable conditions obtaining now. If the above recommendations are put in place, the two focus groups felt that this might even make retention of the CNS's possible.

Doctor: ...I am concerned here, where do we put that CNS in the District Health System structure? Because these people are near to a doctor or Para doctor... The Ministry of Health must recognize them as senior positions......it is not really the exodus of doctors that is worrying, but also nurses.How sure are we that these CNS's we are going to acquire can stick around with the deplorable conditions that we have.

Nurse. ...Some procedures like vacuum extractions and forceps delivery are not allowed to be done by nurses so the General Nursing Council, Medical Council and government has to be lobbied first in order for the integration to be effective.

These statements pre-empt what WHO, in a joint statement with ICM and FIGO, recommended. They stated that the need for a conducive environment can not be overemphasized which included good conditions of service and the nee for all countries to make sure that every woman and her newborn are in contact with a skilled attendant. The following are some of skills expected for the skilled attendant

to have in a given setting- WHO, 2004 recommends that a skilled attendant working at the Primary Care level in remote areas with limited access to facilities should also be able to do the following:

- Use vacuum extraction of forceps in vaginal deliveries
- Performs manual vacuum aspiration for the management of incomplete abortions
- Where access to safe surgery is not available, perform symphysiotomy for the management of obstructed labour

Advanced (optional) functions that may also need to be performed by selected skilled attendants working at a referral facility included, but not limited to the following:

- Perform Caesarean sections
- Manage complications during pregnancies and childbirth
- Administer blood transfusions

WHO advocates that the exact set of additional and advanced skills must be determined and agreed upon by individual countries.



4.4 IN DEPTH INDIVIDUAL INTERVIEW FINDINGS

The following are the findings from the interview with the Deputy Registrar for the General Nursing Council of Zambia and the Ndola District Nursing Services Managers as policy makers on the integration of a CNS Advanced and Neonatology.

Their views were that the advancement of knowledge in nursing practice is very important in order to keep up with the trends and to improve on the delivery of care and to motivate the nurses. In an effort to meet these objectives, the Zambia Nurse's Association, the General Nursing Council and The Nurse Managers, lobbied government to expand the scope of practice for nurses, to recognize specialist training in so doing allow specialist nurses to open nursing private homes. This was passed in Parliament hence the new 1997 Amended and Midwives Act in Zambia.

Deputy Registrar. ... Yes, there is a register for specialist training in nursing for the specifications are in Article 11 of Act. We are still waiting from more postgraduate programs to open at the University of Zambia; the biggest constraint is the staff to teach. We have only one CNS in midwifery and Neonatology trained in Zimbabwe.The scope of practice has been widened; nurse midwives can do vacuum extractions, prescribe drugs and put up drips according to the amended Act.

Nursing Services Manager.Integration of this CNS would go a long way in meeting the objective of the Ministry of health to take skilled care as close to the family as possible. At the moment Ndola District has only got 3 doctors... The constraint really is the poor economic situation that is prevailing in the country; this has impacted negatively on the delivery of all services.

The interview with the Deputy Registrar and the Nursing Services Manager revealed that great strides have been made in trying to improve the quality of maternal and child health services through the amended Act for nurses and midwives. The effort is in line with mandate by WHO, ICM and FIGO for developing countries to do health reforms with the help of co-operating partners in order to institutionalize the vital function of skilled attendants on all levels of maternal and child health services in order to bring down the high death rate (WHO,2004).

4.5 CONCLUSION



The findings show that integration is a very good idea but there are several constraints such as the poor infrastructure, non-availability of specialized equipment at the rural health centers where the CNS could best be placed. Participants voiced out there is a need to train more CNS in order to broaden the integration. There is also a need to recognize this post as a very senior post in the Health system in terms of hierarchy and remuneration and to define the roles clearly in order to have a smooth integration. There is also a need to retain and sustain the CNS.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

The objectives of the present study were to determine the doctors and midwives understanding of Advanced Midwifery and Neonatology Clinical Nurse Specialist practice and to determine how midwives and doctors perceive the integration of Advanced Midwifery and Neonatology Clinical Nurse Specialist in the health system as a whole. This was motivated by the fact that despite the commitment by the Zambian government to provide equity of access to cost-effective quality care as close as possible to the family, targeting vulnerable groups, including safe motherhood, the maternal mortality rate has been rising. Some of the reasons for the rising mortality rate advanced are shortage of doctors and non- availability of properly trained man power, hence the need to conduct a study into the feasibility of integrating an Advanced Midwifery and Neonatology CNS in the District Health System of Ndola in Zambia. In this study it was revealed that integration of a CNS was a good idea due to the specialized skills that she has. She can be able to lead other nurses, educate, collaborate, do consultative roles and fill in the gap for the doctors as well as reduce their hours.

CNS would be best placed in very remote and rural health centers where doctors are not available since there are too few to go around. The nurses would have another nurse to consult and assist and exhaust the interventions that can help before calling on the doctor and this may reduce unnecessary nurse to doctor referrals. Placing the CNS on the existing structures and should not create any problems as long as her level of involvement and her roles are clearly defined. The integration would be very beneficial in the care of the newborn especially resuscitation since the midwives are manning most labour wards in the country and there are very few pediatricians who may be placed to provide such specialist care to neonates.

There were opposing views concerning placing the CNS in the management team. If placed at that level, this nurse will contribute towards attaining high standards in the way decisions are made concerning clinical issues. As long as she spends some time providing clinical care and advice in the clinical areas.

Though the best placement of this CNS is at a health center, chances of her getting some job satisfaction are very minimal. This is because there is no equipment in the clinics that can aid her in her work. The CNS may not come back and accept to work under prevailing deplorable conditions.

This nurse specialist may not be recognized and rewarded in terms of (remuneration) which may lead to her not sticking around to work in Zambia. Why then train them if we are not sure of retaining them?

Doctors, particularly in big hospitals and big health centers may feel that the CNS will be taking away their job since caesarian sectors, vacuum extractions and forceps delivery have been left to the doctors domain since time immemorial. Acceptance by fellow nurses may depend on whether the CNS is going to prove they are more skilled, otherwise nurses without specialist qualifications may not view them as highly qualified cadre of nurses. Furthermore, some of the procedures in the procedure manual for the CNS were considered to be basic like the examination of the newborn, twin deliveries and manual removal of the placenta.



Unless this type of training is done locally in Zambia, it still remains a fallacy because not many nurses will be trained even if they would wish to undertake the training due to problems of sponsorship.

According to the Amended Nurses and Midwives Act, specialist nurses are allowed to do vacuum extractions, put up drips, prescribe medication and open their own nursing homes.

In conclusion, the objectives that the present study set out to investigate have been fulfilled.

5.2 RECOMMENDATIONS

5.2.1. It is recommended that training of the CNS Advanced Midwifery and Neonatology should be done locally in order to broaden the integration, since training abroad is too expensive.

5.2.2. It is recommended that the evolvement of nursing must be taught in the various health professional training institutions in order for the various professional to be well aware of these trends, since nursing is the core function in the delivery of health care.

5.2.3. The ministry of health must define clearly where the CNS comes into the health system hierarchy and remuneration package. This will help lessen the confusion at the time of integration.

5.2.4. The Ministry of Health must improve on the infrastructure, provide equipment and solve other logistics at the rural health centers in order for the CNS to be more effective at the Primary level this in turn will help in realizing the vision of the Ministry of Health in providing equity of accesses to quality cost effective care as close as possible to the family, thus lowering the maternal death rate.

5.2.5. There is need to do a study on a wider scale on the feasibility of integration of CNS Advanced Midwifery and Neonatology. That is, in the rural districts of Zambia where the participants felt was the best level of placement for a CNS.

5.3 LIMITATIONS OF THE STUDY

1. Since this was a new concept, a lot of time was spent on trying to make the participants in the focus group discussions understand the role of the CNS in the District Health System in The delivery of maternal child and health services.

2. Due to the time limitations of this study (mini thesis) and financial constraints, the researcher could not do a larger study.

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Appendix A.

SCECIMENT INTERVIEW: WITH THE DEPUTY REGISTERER OF THE GENERAL NURSING COUNCIL OF ZAMBIA ON THE 4 MARCH 2001 AT 14HRS FOR 30 MIUTES

My name is Beatrice Kabamba. Thank you that you could find time out of your very busy schedule to meet with me. I am a student from the University of the Western Cape doing a Masters Degree course in advanced midwifery and neonatology with a view of becoming a clinical nurse specialist. One of the requirements is to submit a mini thesis. My study topic is an

inquiry into the feasibility of integration of Advanced midwifery and Neonatology Clinical Nurse Specialist into our district health system in the view of improving on the delivery of quality care in maternity services. In view of this what would be the role of the General Nursing Council.

...Well I would start by saying it is good to know that you are doing this course in fact you should have notified us as Nursing Council when you were going we would want to keep a record of nurses who are doing specialist training. As you well know General Nursing Council is a statutory body responsible for regulating delivery of nursing care and training. As General Nursing Council we have advocated for an amendment to the 1970 Nurses and midwives Act. We have now got an amended act of 1977 according to Article 11 a person shall qualify to be registered on the specialist register if that person has basic qualifications, post-graduate qualifications from a recognized institution and has paid the prescribed fee. So you can see that we are advocating for specialist training only our University has not got the programs yet, the only clinical nurse specialist was trained in Zimbabwe, she completed a year ago.

What about terms of integrations what is the General Nursing Council's view?

...Again you will note that in the new Act in part vi Article 21 we have advocated for a much wider and accountable scope of practice in Nursing and midwifery and it says a nurse

midwife or specialist shall provide preventive therapeutic, palliative and rehabilitative care and treatment of illness normally carried out in nursing and midwifery practice and in a nursing home. That is assess, diagnose and provide the relevant therapeutic intervention carry out physical examinations, insert and remove devices, carryout resuscitation and in and carry out vacuum extraction and carry out intravenous infusion procedures. Prescribe relevant drugs and other pharmaceutical preparation as defined by the National drug formulary committee, counseling and all relevant care. You know that we want nurses to open nursing homes and agencies and this in article 23 of the amended Nursing Act and the criteria is that you must be a nurse specialist in order to qualify to open a nursing home and this is a form of integrating this specially closer to the community and because of the shortage of doctors we hope by widening the scope of practice for the nurses who can now do procedures like vacuum extractions, putting up intravenous infusions and prescribing drugs we can keep up with the standard of care. But you see that there is a need for training in higher skills like the course you are doing.

THANK YOU FOR ACCORDING ME THIS TIME

Appendix B

FOCUS GROUPS DISCUSSION

Checklist to guide the discussion

The feasibility of integrating advanced midwifery and neonatology clinical nurse specialists in the district health system can be justified by a number of factors. These include for example:-The high maternal mortality rate of 649 per 100,00 live births in partly due to human resource constraints namely:-

- Shortage of doctors
- Non availability of properly trained manpower
- Historically nurses and midwives are a critical category of staff involved in providing maternal and child health services in Zambia. Therefore training this cadre to a specialist level in midwifery and neonatology and integrating them in the system could help achieve quality care and reduce the related mortality and morbidity.

Please give your views

2. What about heir placement in the institutional structures? HOw do you see them being placed?

Please give your views

3. How do you see these staff being accepted by the other nurses and doctors?

Please give your views

4. Any other comments you have on this issed of integrating the clinical nursing specialist?

THANK YOU

APPENDIX C

.....2001

.....

Dear Sir/Madam

RE: RESEARCH PROPOSAL – AN INQUIRY INTO THE FEASIBILITY OF THE INEGRATION OF ADVANCED MIDWIFERY AND NEONANTLOGY CLINICAL URSE SPECIALIST IN THE DISTRICT HEALTH SYSTEM OF NDOLA URBAN COPPERBELT PROVINCE IN ZAMBIA

I am a postgraduate student at the University of the Western Cape Nursing Department. I plan to carry out research on the above subject in fulfillment of the requirement for master's degree (MCur).

The aim of the study is to conduct a study into the relevance of the integration of advanced midwifery and neonatology clinical nursing specialist in Ndola district health system, in order to improve the delivery of quality maternity care. It is also anticipated that the results of the study will contribute to the body of knowledge in the role and functions of the advanced midwifery and neonatology clinical nursing specialist.

I write to request for your kind participation in his study and to give your views on the subject. This will involve rape- recording of focus group discussions. The recordings will be transcribed and sent back to you for verification where necessary. You are assured of anonymity and confidentiality of the discussion and you have the right to take part in the study or decline, should you feel uncomfortable at any time during the interview you are free to withdraw.

I look forward to working with you and thank you for your cooperation. I can be contacted at the following address from December 2000 until February 2001:

Arthur Davison Children's Hospital, P O Box 240227, Broadway, NDOLA. Tel. 640224

Yours sincerely

BEATRICE KABAMBA

APPENDIX D

CONSENT FORM

I freely and voluntary consent to participate in a research project under the supervision of Miss Beatrice Kabamba. I understand that the aim of this study is to conduct a study into the feasibility of the integration of advanced midwifery and neonatology clinical nurse specialist in Ndola district health system. In order to improve on the delivery of quality maternity care. It is also anticipated that the results of the study will contribute to the body of knowledge in the role and functions of the advanced midwifery and neonatology clinical nursing specialist, as well as show how the roles and functions will enhance the delivery of quality care with the particular field of nursing.

Witness		Date
Participant		Date
I have explained the research procedure to which the subject had consented to participate.		

..... Signature

Date

Appendix E

The Executive Director Ndola District Health System, P O Box 71943, Broadway, NDOLA.

Dear Sir/Madam

RE: RESEARCH PROPOSAL – AN INQUIRY INTO THE FEASIBLITY OF THE INTEGRATION OF ADVANCED MIDWIFERY AND NEONATOLOGY CLINICAL NURSE SPECIALIST IN THE DISTRICT HEALTH SYSTEM OF NDOLA URBAN COPPERBELT PROVINCE IN ZAMBIA

I am a postgraduate student at the University of the Western Cape Nursing Department. I plan to carry out research on the above subject in fulfillment of the requirement for masters' degree in nursing (MCur).

The aim of the study is to explore on the feasibility of the integration of advanced midwifery and neonatology clinical nursing specialist in Ndola district health system, in order to improve the delivery of quality maternity care. It is also anticipated that the results of the study will contribute to the body of knowledge in the role and functions of the advanced midwifery and neonatology clinical nurse specialist as well as show how the role and functions will enhance the delivery of quality care within the particular field of nursing.

I look forward to your consideration in this matter. I can be contacted at the following address from December 2000 until February 2001.

Hospital,

Arthur Davison Children's

P O Box 240227, Broadway, NDOLA. Tel 640224

Yours truly,

BEATRICE KABAMBA