A description of the insights and attitudes of undergraduate health sciences students in the Interprofessional Education Programme at the University of the Western Cape:

Experiences of community and health sciences students

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A mini thesis submitted in partial fulfilment of the requirements for the Degree of Masters in Public Health in the School of Public Health, University of the Western Cape.

November 2012

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Key Words

Interprofessional/Interdisciplinary

Undergraduate health sciences students

Perceptions

University of Western Cape

Attitudes

Social responsibility

Community placements

Collaboration

Rural practice

Abstract

Interprofessional Education (IPE) for the undergraduate health sciences students has been seen as a vehicle that could prepare health professionals for improved collaboration in health care (Reeves, 2000). Early health curricula did not allow interaction among students of different disciplines. As a result students were equipped to only function in their own disciplines for their own professional purposes (Beatty, 1986). The Faculty of Community and Health Sciences (CHS), at the University of the Western Cape (UWC), introduced IPE in 1994 and established an Interdisciplinary Teaching and Learning unit (ITLU) to coordinate the interdisciplinary structured modules for undergraduate community and health sciences students.

This research is an additional qualitative inquiry which is part of a bigger IPE study. The main aim of the bigger study, coordinated by the Collaboration for Health Equity in Education and Research (CHEER), is to investigate the impact of Collaborative Interprofessional Education and Practice on the development of socially responsible graduates who are well equipped to practice in rural and disadvantaged areas. This researcher aimed to explore the insights and attitudes of the current third and fourth year undergraduate community and health sciences students who are involved in the IPE programme regarding their appreciation of the other students' profession and their attitude to future interprofessional collaboration. Students were asked about their experiences in the IPE programme focusing on their initial experience, interaction in interprofessional groups and insights, and attitudes to being involved in the programme. Based on their experiences, they were also asked to provide recommendations for the programme. An exploratory qualitative study was conducted using focus group discussions and semi-structured interviews.

Six focus group discussions were held with 3rd and 4th year students from occupational therapy, psychology, social work, physiotherapy and nursing at UWC to explore in-depth students' insights and attitudes towards the IPE programme. Two additional interviews were conducted with students individually. Six semi-structured interviews were conducted to obtain background information from key informants (Unit coordinator,

Course convenor, two field coordinators and two lecturers) involved in the IPE programme at the UWC. The data collected were then transcribed and analysed by thematic content analysis.

The findings revealed that the UWC IPE programme is very useful and important and can be potentially beneficial in health professional training especially in fostering collaboration. The results show both positive and negative attitudes by students at their initial encounter with the programme and a shift to a positive attitude and greater insight as students became more involved in the programme. The positive attitude is linked to an appreciation of their own and other professions' roles; recognition of the importance of a collaborative role in the health care setting and the relevance of the programme (content, practical work) to their work. The negative attitudes emanate from uncertainties and structural challenges within the programme (timing, lecturing process, etc). There are also challenges linked to course organisation which are important to improving the programme and have a potential to influence the attitudes of students.

Declaration

I declare that the study "*A description of the insights and attitudes of undergraduate health sciences students in the Interprofessional Education Programme at the University of Western Cape: Experiences of community and health science students*" is my own work and that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Linda Mashingaidze November 2012

Acknowledgements

I would like to acknowledge the following for the assistance, support, motivation, inspiration and time. I am truly indebted to all, for this work I have achieved:

I would like to dedicate this research project to my husband Ngonidzashe Shuro CA (Z), CA (SA), who saw the potential in me and motivated me to pursue these studies. I thank him for his support and encouragement. I would like to thank him for the appreciation of my divided and minimized attention during my engagement with my studies and having to play with our sons so that I would get maximum time for my research.

I am truly indebted to the following for their support:

My sons Tinengoni, Taropafadzwanashe and Tinotendaishe
My late mom Romana Marufu
My uncle and aunt Mr. and Mrs. Marufu
My sisters- Tatenda and Kesia
My close family members
The Students and Key informants who participated in this research
My supervisors- Ratie Mpofu and David Sanders
The IPE coordinator- Gerard Filies
Service Learning Unit at UWC in particular Tracey-Ann and Priscilla for their support
Collaboration for Health Equity in Education and Research
The University of Limpopo Health Promotion unit
SOPH Administrators Corinne and Janine
Supportive colleagues at People's Health Movement

List of Abbreviations

CHEER	Collaboration for Health Equity in Education and Research
IPE	Interprofessional Education
UWC	University of Western Cape
IPOC	Introduction to Philosophy of Care
ICBPM	Interprofessional Community Based Practice Module
PHC	Primary Health Care
MHD	Measuring Health and Disease
SOPH	School of Public Health
OT	Occupational Therapy
HP	Health Promotion
PHM	People's Health Movement
WHO	World Health Organisation

CHAPTER 1

INTRODUCTION

1. Introduction

This chapter provides a background as an introduction to IPE and states its importance. It also highlights how the IPE programme began and is implemented at the University of Western Cape (UWC). It further gives a rationale for this research stating the research questions and objectives and at the end focuses on the relevance of IPE in health professional curricula and in Public Health.

1.2 Background

"An IPE intervention occurs when members of more than one health and/or social care profession learn interactively together, for the explicit purpose of improving interprofessional collaboration and/or the health/wellbeing of patients/clients. Interactive learning requires active learner participation, and active exchange between learners from different professions" Reeves, Zwarenstein, Goldman, Barr, Freeth, Hammick & Koppel, 2009:3.

Globally, health policies emphasize the importance of collaboration among health professionals with the assumption "that enhanced collaboration will reduce duplication of effort, make better use of scarce resources and more effectively meet the complex needs of patients" (Reeves, 2000:269). The ethos of collaboration among health professions has gained more support in recent times, resulting in a growing recognition of a health team among medical doctors, dentists, nurses, physiotherapists, occupational therapists, dieticians, pharmacists, and other allied health professionals (Liakos, 2008).

The need for the IPE initiatives resulted from weaknesses experienced within health systems, characterized by isolation of health professionals from each other as a result of decades of separation of health professionals' individual educational programmes (Beatty, 1986). Early health curricula did not allow for interdisciplinary interaction

among students. Therefore students were only equipped to function in their own disciplines for their own professional purposes. This resulted in "practice shock" (Beatty, 1986: 21) when they needed to work with other professionals in health care settings. Beatty uses the term "practice shock" to describe a failure to cope and frustration in working with other professionals on the same patient. More recently, IPE for undergraduate health science students has been introduced by many Higher Education Institutions because it has been seen as a vehicle that could prepare health professionals for improved collaboration (Reeves, 2000).

In 1994, the UWC's initial efforts in primary health care were made when the Faculty of Community and Health Sciences (CHS) reviewed "its undergraduate curricula in the light of the government's new health policy based on primary health care" (SOPH, 2005-2006). The faculty of CHS "is committed to excellence in education and training, research and community service which promotes a progressive primary health care approach in an inter-professional manner" (Available online: http://www.uwc.ac.za).

The then Public Health Programme (later the School of Public Health) was given responsibility for leading the development of this initiative. Over the years the interdisciplinary primary health care modules have been introduced into the undergraduate curricula for all health disciplines. The introduction of the IPE initiatives at UWC was also in line with the changes in the health situation in South Africa and internationally.

The IPE at UWC is driven in three ways (Mpofu, 2010: 1):

- *Interdisciplinary core courses which allows for collaborative Interprofessional education (primary health care; philosophy of care; health promotion) and these include university and community partnerships (Mpofu & Waggie, 2009)*
- *Service learning and practice (same sites but may be discipline specific)*
- *Interprofessional collaborative Practice module (ICBP)*

An interdisciplinary Teaching and Learning Unit (ITLU) was introduced in the CHS as part of the faculty management and aiming to ensure collaboration among different professions. This unit coordinates all integrated curricula to facilitate the joint learning

among students undertaking professional programmes. Four core interdisciplinary modules have been developed as follows: Introduction to Philosophy of Care for first year (IPOC); Health, Development and Primary Health Care (PHC) for first year; Interdisciplinary Health Promotion (HP) for second year, Measurement of Health and Disease (MHD) for third year and Interprofessional Community Based Practice (ICBP) for fourth year. These modules' aims and objectives implicitly advocate for the cultivation of collaboration and involve the following disciplines (undergraduate programmes): dietetics, physiotherapy, human ecology, occupational therapy, social work, nursing, sport recreation and exercise sciences, psychology, and natural medicine. Students in these disciplines are placed in various disadvantaged and rural community settings as interprofessional teams to work together on different projects. The university has formalized partnerships which exist within rural and marginalized communities to create opportunities for placements and projects. CHS students work as interprofessional teams in the different health care settings which include clinics and schools. This study focuses on projects involving collaboration of more than one profession in a rural community, Theewaterskloof (TWK). The TWK Community Partnership was initiated in 2004 by the then director of social services, a UWC alumnus. The other project is the UWC Community Rehabilitation Project in an underserved urban community of Mitchell's Plain.

1.3 Purpose

As a fairly new initiative, the UWC IPE programme has not been evaluated. The researcher was involved in a similar research project on IPE which is a bigger study that uses a mixed method approach. The bigger study is part of the Collaboration for Health Equity in Education and Research (CHEER[1]) project and aims to "investigate the impact of Interprofessional Education and Collaborative Practice on the development of socially responsible graduates who are well equipped to practice in rural and disadvantaged areas". Based on this bigger study, the researcher focused on the students' insights and attitudes as an additional qualitative inquiry or piece to complement and add to the bigger

[1] The Collaboration for Health Equity in Education and Research (CHEER) is a research team formed in 2003, comprised of a representative from each university in South Africa with a Health Science Faculty, all of whom are involved in community-based education or rural health. The aim of the CHEER Collaboration is to promote health equity through appropriate educational and research projects in health science education in South Africa (www.cheer.org.za).

study. This study was therefore designed to explore in-depth the value the programme has had for CHS students towards the possibility of future collaboration and joint work in health care settings in the real world.

The other rationale for this research emanated from the limited literature on the impact of IPE, particularly within the African context, which is characterized by shortages in human resources for health and under resourced health systems. Even though IPE has been on the agenda for years, such curricular initiatives are still embryonic and therefore evidence to support implementation of this approach is still limited in the broader health care context (Mendez, Armayor, Navarlaz & Wakefield, 2007: 329). Previous studies carried out give evidence of the benefits of positive changes in attitudes and perceptions of students to working interprofessionally (Parsell, 1999; Hoffman & Hanish 2007, Liakos, 2008).

IPE and the concept of public health have common goals and principles which include working collaboratively to ensure that health needs of both individuals and populations are met. It is clear that public health aims to ensure "emphasis on collective responsibility for health and a primary role for the state in protecting and promoting public health". There are five major public health strategies for influencing health namely; preventing disease, promoting health, improving medical care, promoting health-enhancing behaviour, and controlling the environment. Therefore, this study is in line with these strategies as it aims to highlight that by promoting IPE, it could improve public health as it would foster collaboration. An example would be a nutrition programme in which communities and the state work together to set up feeding points, identify, examine, rehabilitate malnourished children ; establish food gardens and provide health education. In such a case, for example, nurses and doctors could train and work with communities to identify malnourished children and work hand in hand with nutritionists and other sectors to grow food that is appropriate as well as provide relevant health education. Therefore, the understanding of different professional roles and the involvement of different professionals is more likely to embody a comprehensive primary health care approach.

IPE in health worker training institutions is important in strengthening health systems. If human resources for health are trained in such a way as to collaborate on achieving health care goals then it could result in improved use of resources, reduced error and therefore improved health service outputs. For example, this could result in better outreach to communities, potentially reduce mortality due to lack of access to health services and proper referrals. An improved health team working together would be more likely to implement good quality health services.

1.4 Research question

What are the insights that health sciences students have gained in their interprofessional work and what are their attitudes to future interprofessional collaboration?

The specific objectives of the research are:

- To explore the experiences of students with regard to interprofessional work;
- To explore the extent to which the IPE programme provided students with an insight into the role of and association between their profession and other health professions; and
- To explore the extent to which the IPE influenced students' attitudes towards collaboration in future work.

Rationale

The reforms in health personnel education, training and changes in the health situations worldwide have led many universities to review their curricula. Universities are constantly exploring innovative ways to improve the quality of the health worker they produce. The aim is to produce a health worker who will be better able to respond to the needs of the community and work within a health team. The need to find effective ways of working as health professionals in an integrated way led to IPE as a means to developing a health team based on mutual respect, understanding and trust which is

important in response to the changing health and social problems and mounting public expectation (Barnsteiner, Disch, Hall, Mayer & Moore, 2007).

1.5 Conclusion

This thesis is divided into five chapters. The second chapter presents a review of the literature related to IPE; definitions, benefits and challenges. The third chapter describes the methodology used for the study; design, data collection and data analysis. The fourth chapter presents the results of the study and discussion which includes major themes and sub-themes. In the fifth and final chapter, a summary of findings is provided, recommendations are made and conclusions drawn from the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter a review of the key literature regarding the research topic is presented, in order to place the research topic in a wider context. An overview of IPE is presented, focusing first on the history and global picture. The researcher provides literature on IPE definitions, benefits and challenges. This review is intended to give a brief essential overview of current literature in each area rather than to be exhaustive of each category.

Historical evidence highlights that IPE was recommended as early as 1978 by the World Health Organisation (WHO) as a component of primary health care (Hoffman & Hanish, 2007). The WHO 1988 report *Learning together to work together* facilitated the development of IPE activities worldwide to support effective team work (Norman, 2005). In support of IPE, international organizations such as the WHO, the World Federation of Medical Education and the Organisation for Economic Co-operation and Development introduced various campaigns internationally as early as in the 1970s to gain support and expand the programme to all parts of the world (Mendez et al, 2007:328).

2.2 Defining interprofessional education

The following terms within professional training have been used interchangeably with different prefixes – "multi, inter, cross, joint and shared- attached to different adjectives- disciplinary and professional- which are in turn attached to different nouns- education, training, learning and study" (Barr, Hammick, Koppel & Reeves, 1999:536). The researcher acknowledges the continuing debates about the terms but for the purposes of this study, the terms 'interprofessional or interdisciplinary education' will be used interchangeably. The researcher considers that the definition should include a component

of collaboration and interaction for the different skills in a health team to be used effectively in health care (Cooper, Carlisle, Gibbs & Watkins, 2001).

The following definitions are applied to the proposed study:

'……learning together to promote collaborative practice' (Hammick, 1998 as cited by Cooper et al, 2001: 229*);*

'…….two or more professions learn with, from and about each other to improve collaboration and the quality of care' (CAIPE, 2002: http://www.caipe.org.uk/about-us/defining-ipe/).

IPE focuses on students looking at a task from the perspective of other professions as well as from their own. This entails a greater level of interaction between students during the learning process. Students obtain knowledge, skills and attitudes which they would otherwise not have acquired in isolated professional-specific education (Hallin, Kiessling, Waldner & Henriksson, 2009). IPE principles are associated with benefits to the community through the close collaboration with professionals; the participation of the client in the learning process as patients are included in all the processes of health care; and the expectation that each profession respects the integrity of the other, which creates a conducive environment to learn from one another (Barr et al, 1999).

2.3 Entry point of IPE in health care curricula

Globally, IPE was introduced within institutions, with the ongoing debate on the best time to introduce it: early first year or only after licensure (after they have qualified and are no longer in the formal education system) when professionals are clear about their professional identity (Hoffman & Hanish, 2007). It is argued that if it is introduced early, in their first year of study it could prevent "negative interprofessional attitudes" that could be challenging to alter after licensure. Those who argue for it after licensure explain that professionals will have established their own professional identity and would be in a better position to share experiences (Coster, Norman, Murrells, Kitchen, Meerabeau, Sooboodoo & d'Avray, 2008). From the facts of this debate, findings from a systematic review of various interprofessional education initiatives, found that early

learning experiences were more beneficial in developing healthy attitudes towards interprofessional working (Cooper et al, 2001) as intentions and conflicts can be resolved at an early phase to build healthier relationships among professionals.

2.4 Benefits of IPE

Recent evidence shows that students in various IPE initiatives have had positive changes in their knowledge, skills, attitudes and greater level of interactivity between the different professionals during learning, which they would not have acquired in uniprofessional education (Liakos et al, 2008; Mendez et al, 2007; Cooper et al, 2001). Coster, Norman, Murrels, Kitchen, Meerabeau, Sooboodoo & d'Avray (2008) used a longitudinal survey to measure changes in interprofessional attitudes at four- time points of pre-registration students drawn from eight health care groups in three higher education institutions in the UK. Consistent with the findings of the systematic review by Cooper et al (2001), the study affirms the benefits of IPE to interprofessional learning, working and the need for an early start of IPE in health care curricula. A Canadian study by Medves (2008) that used community based research to look into a new IPE course, examined the process of integrating IPE into curricula with students working in the rural communities. The results indicated the potential value of IPE programme in influencing career choices of students to work in rural and disadvantaged communities. The following phrase quotes students' views of the experience:

'one theology student decided to apply for a bachelor of education program to become a teacher; a nursing student chose to do her eight week practice placement in a rural community; and an education student decided to apply for and then accept a teaching position in a rural community' (Medves et al, 2008: 7).

Other studies that made use of a quantitative approach include Reeves (2000); Curran et al, (2005); and Hallin et al, (2009). They share similar findings with regards to students' attitudes, perceptions and knowledge of working interprofessionally in the IPE programme. Reeves' (2000) study highlighted that the students' experience led to greater interactivity with no one professional being dominant and that such an experience had potential to improve communication, enhance cooperation and reduce professional

rivalry, which is often encountered in health care settings (Reeves, 2000). Hallin et al's (2009) findings indicate that in all four categories of students (medicine, nursing, physiotherapy and occupational therapy), there was improved knowledge of the other professions' competences, especially for medical students who had a deeper knowledge than other professions of the role of other disciplines such as physiotherapists and occupational therapists. This was as a result of spending more time with the other professions. This improved knowledge was noted in students in their last term of pre-qualifying education supporting the argument to introduce IPE in earlier years of the curricula. This early professional socialisation plays a powerful role in challenging their stereotypical perceptions of one another and therefore dealing with negative perceptions and enlightening learners on other professionals' roles (Curran et al, 2005). Cross cutting benefits shown from these studies and other literature include improvement in the individual's own professional competence and role; understanding of the importance of communication and teamwork to patient care; enhanced attitudes towards collaboration and interprofessional approaches.

Additional potential benefits highlighted by Mendez et al (2007) include:

- students engage in a detailed exploration of health and social roles;
- better understanding of both the exclusive and overlapping competences evident within the caring arena;
- educational benefits such as increased knowledge and assimilation in new areas of learning whilst encouraging interprofessional communication; better learning outcomes; and
- increased job satisfaction and workforce flexibility while simultaneously reducing organizational pressure since the health problems are tackled in a team

Though there is a dearth of research –based evidence to highlight the long term outcomes of IPE, it is clear that IPE has potential intermediate and short term benefits for students. The challenge lies in how higher education institutions can work better to foster these benefits of IPE (Illingworth & Chelvanayagam, 2007).

2.5 Challenges in IPE

Whilst changes in national health strategies and mission policies of universities are increasingly supporting the implementation of IPE programmes, it is a profoundly difficult process to achieve (Liakos et al, 2008). The reason for this challenge is linked to the need to change the attitudes of students and stakeholders such as faculty and administration to see the benefits of IPE. Liakos (2008) mentions that not only should these attitudes be evaluated, but particular societal norms within students and people should also be confronted. This would require huge efforts for success. Gilbert (2005) as cited by Liakos, (2008: S44) states that:

'….the challenges include structural differences between faculty organizations; conflicting university and professional agendas; lack of adequate human resources to implement such programs, both within the university and across the community boundary; complex communication demands, within the university and with its community partners; rotation and replacement of team members; and lack of regular evaluation of interprofessional educational goals and programs'

As a result, there are difficulties in course organisation and developing clear guidelines which have implication for students' attitudes to IPE. This supports Coster et al's, (2008) findings in Canada, which highlight that uncoordinated IPE may reinforce attitudes of students who begin with a negative perception. Many of the motivations for IPE refer to changing attitudes, not just attitudes to patients but also interprofessional attitudes (Carpenter, 1995). Therefore this study is designed to explore the attitudes (approach) and perceptions (insight or awareness) of students with regard to IPE. The intention is to explore if there has been a shift in health science students' experiences and any change in students' attitudes that promotes interprofessional collaboration especially in marginalized and under resourced facilities.

2.6 Conclusion

The main point highlighted in this literature review is the importance of IPE, which has been recommended over the years to improve the quality of health services and collaboration amongst health workers. Various studies in Chapter 2 indicated that the benefits of the IPE programme are linked to improved awareness of other professions, influence of career choices towards working in rural and marginalized communities and additional benefits such as job satisfaction and better learning outcomes. However literature also revealed the difficulty of implementing the programme linked to structural differences, attitudes of faculty members and inadequate course organisation. Studies included in this chapter highlighted greater motivation in implementing IPE as a means to improve students' attitude towards interprofessional work and therefore improved services.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In this chapter, the researcher gives an account of the methodology that was used in this research study. The study design, study population and sampling procedures are outlined. The data collection procedure and data collection tools are described. The researcher also explains the rationale for the choice of these methods, the limitations and adaptations faced during the data collection process.

3.2 Study design

The researcher used an exploratory qualitative research design. The study design was relevant in order to gain an in-depth account of students' insights and attitudes regarding the IPE experience.

3.3 Study population

The study population included all the current third and fourth year undergraduate CHS students at UWC. Undergraduate health sciences at UWC consist of the following disciplines: dietetics, physiotherapy, human ecology, occupational therapy, social work, nursing, sport recreation and exercise sciences, psychology and natural medicine.

This particular population was chosen based on the faculty's vision which includes inter-professional work among students. Students had been involved in several IPE modules from the first year of study and exposed to at least three modules with different disciplines in the same faculty.

3.4 Sample- criteria and sampling procedure

Purposive sampling was used to obtain the sample of students who could give an in-depth account of their IPE experiences. The researcher obtained a list of students from the coordinator. The list had contact details of current and previous students who had been or still involved in the IPE programme in 2011. The list included 3rd and 4th year students and was used to obtain a sample for the focus group discussions (FGDs). The coordinator also recommended names of lecturers and supervisors that could be interviewed. Lecturers also provided a list of students who were available at the time of data collection in August 2012.

The researcher was unable to interview all the professions even after several approaches were used, such as announcements in classes, emails, posters on department boards and communication with lecturers were done in order to invite students from all disciplines. However the sample size obtained was sufficient to capture the range of accounts resulting in an exhaustive (saturation) process. The sample included forty-three students from psychology, social work, physiotherapy, occupational therapy and nursing. These professions represent at least half of the professions in the faculty of CHS.

3.5 Review of documents

To understand the IPE curricula, the researcher reviewed the different module guides which were provided by the coordinator. The module guides for IPOC, PHC, HP and ICBP are used as part of the programme for the interdisciplinary courses and are important in attaining curriculum objectives. It was useful to understand the objectives and content of these guides and relate them to the students' experiences of and attitudes towards them.

3.6 Data collection procedure and data collection techniques

The data collection process took place in March 2011 and August 2012 at UWC. The researcher received ethical clearance to conduct the research from the UWC Senate

Higher degrees committee prior to conducting the data collection (Registration No: 11/1/41-See Annexure G).

Six FGDs were conducted with 3rd year and 4th year students to obtain experiences of the IPE. Two additional individual interviews were conducted with students who could not join the FGDs. Consent was sought from these groups and the discussions were audio taped for purposes of analysis later on. Six interviews were held with the IPE coordinator, course convenor, two lecturers and two field coordinators. The field coordinators from Grabouw and Genadendal were recommended by the IPE coordinator. Grabouw and Genadendal are rural communities located about 65 km south-east of Cape Town and fall under the TWK municipality. The FGDs and interviews were held in the occupational therapy department, psychology department, School of Public Health lecture room, Human Ecology building, Physiotherapy clinic, Grabouw and Genadendal.

3.6.1 Focus group discussions

Khan & Manderson (1992: 57), as cited by Liamputtong & Ezzy, 2005: 76) describe a focus group interview as a qualitative method "with the primary aim of describing and understanding perceptions, interpretations, and beliefs of a select population to gain understanding of a particular issue from the perspective of the group's participants". The particular aim of the FGDs conducted was to obtain the insights and attitudes of the students with regard to the IPE programme.

The researcher used an FGD schedule (see annexure A) to facilitate the discussion with the students. The FGDs were held as follows; the first FGD was held with ten third year occupational therapy students; the second with twelve fourth year occupational therapy students; the third consisted of five students (two social work and three physiotherapy); the fourth consisted of five students (two social work and three physiotherapy students); the fifth group consisted of five psychology students and the sixth of two social work and two nursing students. The two individual interviews consisted of a 3rd year nursing and a 3rd year physiotherapy student. Issues of confidentiality and consent were sought from the students before conducting the FGDs. Each participant was provided with an information

sheet which explained the research aims and objectives. The use of the FGDs enabled the researcher to obtain an in-depth account of students' experiences in terms of what worked and what did not work, continuing challenges faced, group dynamics, time table scheduling, logistics and what they have gained having experienced the IPE programme.

3.6.2 Interviews

An in-depth interview is normally described as a dialogue between two people that assists in understanding a person's experience in-depth in which meaning and interpretation predate the interview (Liamputtong & Ezzy, 2005).

In-depth interviews were conducted using an interview schedule (see annexure D). In-depth interviews were necessary for this study to help explore opinions of key informants on the benefits, background and structure of the IPE programme. The interview schedule was adapted from the CHEER data collection instruments (see annexure F). Informed consent was sought from both interviews and they were each provided with the relevant documents describing the aims and objectives of the research (see annexure C). Six interviews were held with key informants who included two IPE field coordinators, the IPE coordinator, two lecturers and the course convenor.

3.7 Data Analysis

The findings were analysed into codes and themes using thematic content analysis. The approach is quite basic and useful in categorizing data into recurrent themes (Green & Thorogood, 2004). The researcher transcribed the interviews and FGDs verbatim assisted by a research assistant at the Health Promotion unit at the University of Limpopo. The process involved listening to the audio tapes several times so as to become immersed in and familiar with the data. Transcribing commenced early during data collection to identify possible emerging themes. The transcripts were coded informed by the literature review and aim and objectives of the research. The researcher then identified themes emerging out of the codes. The cut and paste method was used to compare and relate codes placing quotations under themes that were relevant.

Thick descriptions of the accounts were written following a group discussion or interview and analysed to help link with literature, future discussions and interviews. Quotations and phrases with the same content were grouped together and a code assigned. The different codes were organized within each theme and also under the research objectives. As this was exploratory work, categorizing findings into common issues was considered sufficient to meet the purpose of the research (Green & Thorogood, 2004).

3.7.1 Rigour

Rigour is defined as measures applied to ensure the validity and standard of excellence of the entire study process (Rice & Ezzy, 1999; Gifford, 1996). The researcher incorporated different strategies to ensure the trustworthiness and transferability of the study. The aim of trustworthiness in a qualitative inquiry is to support the argument that the inquiry's findings are "worth paying attention to" (Lincoln & Guba, 1985, p.290). Reflexivity was used as one measure to ensure the trustworthiness of the study. Reflexivity as defined by Malterud, 2001: 484 is "an attitude of attending systematically to the context of knowledge construction, especially to the effect of the researcher, at every step of the research process". Therefore the researcher made use of a research calendar (diary) from the beginning of the study to constantly reflect on her actions and record events in the study and any perspectives that influenced the data collection process. A detailed audit trail was kept that provided a clear explanation of the study process to ensure transparency. This also assisted in writing up thick descriptions of the FGDs and interviews.

To strengthen the transferability which the researcher understood to mean the applicability of the study findings "beyond the context the study was done", a thick description of the study population and setting is clearly documented. This also ensures the credibility of the study. To further strengthen credibility, triangulation was used in the data sources and data collection methods. To achieve this, the document review was used to guide the interviews and the FGDs. Interviews were held with the informants, and FGDs were conducted with students which assisted in probing for clarity. As another

means to ensure credibility, the researcher gave the transcripts to colleagues for peer debriefing which is reviewing of the research process by someone who is familiar with the research.

Throughout the research process, implementing the measures of rigour was an attempt to achieve internal coherence of the various stages of the study process from the study problem to its findings.

3.8 Ethical Considerations

The study is an additional qualitative study linked to the CHEER (bigger) IPE study which had already received ethical clearance and is registered as project number 10/7/14. This additional piece also received further clearance and the researcher ensured that all ethical procedures were followed. Detailed explanation of the objectives of the research was provided to the participants and they received an information sheet (Annexure B) which explained the aims and objectives of the study including details pertaining to confidentiality, anonymity and right to withdraw. Participants were asked to sign a consent form (Annexure E) to agree to participate in the study, once they fully understood the purpose of the research. Anonymity, confidentiality and the right to withdraw were assured to all the participants. The research documents are carefully stored and accessed by the researcher only. The final thesis will be submitted to the School of Public Health and to the UWC Library for public access.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter is a report of the findings and discussion of the research. These are classified broadly according to objectives of the study which were exploring: the experiences of students with regard to interprofessional work; the extent to which the IPE programme provided students with an insight into the role of their profession and its association with other health professions; and the extent to which the IPE influenced students' attitudes towards collaboration in future work. As in Howden et al's study (2011: 16), the researcher reports both the findings and provides a discussion in order to present clear links between respondents' views, and "interpretation of these accounts and evolving discussion points". The findings have been further categorized into themes and subthemes with quotations and phrases to highlight the experiences of the students. The major headings for this section are as follows:

- Respondents' characteristics;
- Summary of the IPE;
- The experiences of students with regard to interprofessional work; and
- General recommendations.

These findings offer a great insight into students' perceptions of the IPE programme. The results also allow considerations for improving the IPE programme at UWC and general recommendations that could be applied in the IPE programme as reported below.

4.2 Respondents' characteristics

The respondents interviewed included forty-three students, two lecturers, two field coordinators, a coordinator and course convenor. The researcher focused mainly on students who have been involved in the IPE programme. The students had studied at least three of the IPE modules (IPOC, PHC and HP) and interacted as interdisciplinary groups. In the initial attempt of this research, only occupational therapy students participated. In order to be inclusive, another set of FGDs and interviews were conducted to include the

views of more disciplines, lecturers, supervisors and coordinators. The occupational therapy students interviewed in the first phase of data collection included ten 3rd year students and twelve 4th year students. The disciplines involved in the second phase of data collection included social work, physiotherapy, psychology and nursing. In the second phase, an additional two focus group discussions were held in Grabouw (consisting of five students: three physiotherapy and two social work) and Genadendal (consisting of five students: three physiotherapy and two social work). These two areas are located in TWK municipality, where students were doing their practicals. These were the students placed in the sites at that time. The other students were interviewed on campus in groups of five (psychology), four (two nursing and two social work), while two (nursing and physiotherapy) preferred individual interviews. In the groups with single disciplines, ideas and opinions were inclined in the same direction but as it is stated in the findings, mixed discipline groups had differences in some of the issues and these are highlighted within the findings as different opinions/arguments on the same point (see paragraphs on page 31 as an example). The other disciplines (human ecology, natural medicine, sport recreation and exercise sciences and dietetics) were unavailable at the time of conducting the research. In the senior year, their CHS students are in blocks at hospitals or in other settings, and it is very difficult to set an appointment with them. The other reason is that they were occupied with end of term assignments and preparations for examinations. The lecturers and coordinator were very helpful in identifying and motivating students to participate in this research. The coordinator specifically arranged transport for the researcher to travel to Grabouw and Genadendal to conduct the research.

A total of twenty-two students were interviewed in the first phase of data collection and twenty-one students interviewed in the second phase. After conducting the stated FGDs and interviews, the researcher felt that this sample size and the number of disciplines were adequate for this research.

Key informants were carefully selected to provide both IPE background information and experiences in the sites. The researcher managed to interview two supervisors (field coordinators), responsible for coordinating the students during their placements. In the IPE programme there are two types of supervisors; those that assist in assessing students when they go to schools during the Health Promotion classes and the field coordinators

who live in the communities where students are placed. Only the field coordinators were interviewed.

Two lecturers were interviewed from two different departments in the CHS faculty. One of the lecturers is a former student of UWC and is an alumnus of the interdisciplinary programme. Both lecturers have studied Masters in Public Health at UWC. The course convenor was also interviewed for background information and experiences. The course convenor is responsible for the content of workbooks, recruitment of lecturers, conducting workshops with lecturers on the content, moderating papers, solving issues that students may experience and also involved in lecturing the IPE modules. The IPE coordinator was interviewed in the first phase of interviews.

4.2.1 Response rate

Overall forty-three students and six key informants participated in this research. This includes twenty-seven third year students and sixteen fourth year students. In the second phase of data collection the FGDs were mixed groups of both 3rd and 4th year students.

4.3 Summary of the IPE

The UWC Interprofessional Community-Based Practice Programme handbook (2008), gives a clear outline of the IPE and its objectives. It states that the IPE programme is designed for students to work as health professionals in interprofessional teams in community settings. It has an orientation to practical experiential learning and an emphasis on Comprehensive Primary Health Care. It is meant for students to develop a deeper understanding of their role as individual health professional and the role of the interprofessional teams in addressing the needs of the clients in the community (Gérard C. Filies, 2008 as cited in the UWC ICBPM Manual, 2009).

Adapted from Parsell & Bligh, 1998, the objectives of IPE in the handbook include:

- Openness in communication across disciplines;
- Understanding of perspectives of other professionals;
- Increased knowledge of the range of skills of others;
- Self-questioning of personal prejudice and stereotyped views;

- A need for sensitivity towards other professionals and their values;
- Awareness of distinct diagnostic perspective of other professionals;
- Teamwork skills needed for problem solving;
- Communication between professionals as a barrier to working together;
- Understanding of roles and responsibilities of others;
- Opportunities to meet others not normally part of clinical placements;
- Awareness of areas of crossover and overlap in knowledge and skills; and
- Understanding of differences in professional language

4.4 The experiences of students with regard to interprofessional work

The experiences of the students were categorized into the following subthemes:

- Initial experience and opinions on entry into the IPE programme; and
- Insights and attitude to the programme

The subtheme "insights and attitude to the programme" was further categorized into the following subthemes:

- Understanding other professions' role;
- Understanding the importance of interdisciplinary/collaborative role;
- Importance of Modules;
- Benefits of the programme;
- Challenges/ Structural difficulties; and
- General recommendations

4.4.1. Initial experience and opinions on entry into the IPE programme

In order to understand the IPE programme from the perspective of the students it was important to discuss their initial experience. The students expressed both negative and positive experiences of the initial exposure. Some students felt that the initial introduction to the programme did not make sense and was unnecessary.

"*It didn't make sense, I bunked a lot of classes, and I didn't know that it was compulsory"*

"Felt it was unnecessary and that it was stuff that we already know from high school"

They described that they attended the classes only because it was compulsory. They also mentioned that most of the time the information was just read to them from the text books which they could read on their own and therefore students felt that the lecturing process

was quite "draining". The sense of the sessions being 'draining' was also linked to the fact that the lectures were held in the afternoon when students were exhausted. In some cases students felt that the lectures dragged on for too long and yet they had covered the objectives of the lecture within a short period.

"...the most draining part was the teacher would just stand there and read from the book and say have a discussion and each group then presents, that is actually quite draining especially in the afternoon".

"...In class I could just have gone and read my book but because it's compulsory...."

In some instances as stated above students had to wait until the two hours of the lecture time was over though they had completed the materials for the day in less time. This is because they could not leave before the set time for lectures ended. They also felt that the classes were boring as they were quite formal and needed to be more practical to be interesting. Expectations were raised as one of the outcomes of the IPE programme is practical experiential learning as described in the students' handbooks. Another challenge raised is the unavailability and the difficulty to consult some lecturers who were based off campus.

The course convenor, however, felt that there was a need for more teaching to take place so that students would fully understand the purpose of the programme. In some cases the convenor had received feedback from the students that some lecturers did not stay for the full time period of the lectures.

The other reasons why some students felt it did not make sense to them is that they could not see at the start, the link to and articulation with their profession and health care in the real world. This notion is supported in some qualitative studies (Hammick et al 2007, Rosenfield et al 2011) as cited by Howden et al's study (2011:8) which highlight students' criticism of pre-registration IPE activities. It states that some students "are critical of pre-registration IPE activities that do not closely relate to notions of interprofessional practice and real world scenarios. For some students, the relevance of IPE to clinical practice (Johnson et al 2005, Davies et al 2011) and their profession is

difficult to see (Forte and Fowler 2009)". Overall, there was a lot of consensus among the students that the initial experience was characterized by a lack of clarity of the course.

Students described the modules, especially the first two (IPOC and PHC), as "boring". They elaborated that the modules were "boring" as they lacked practical ways to engage with the other disciplines. They felt that there was not much interaction or activity in learning more about what other disciplines do, like in the health promotion module. An analysis of the two modules and the students' perspective indicate that the handbooks do not specifically mention roles and responsibilities of working interprofessionally but are topic specific. The handbooks, for example IPOC, go into detail on the philosophy of care, but do not give any details on IPE. It is then up to the lecturer to use lecturing methods that incorporate IPE. Students felt that the way the modules are currently structured is not much different from learning about the modules in one's own discipline.

Another group had mixed feelings of being grouped together at the beginning. They felt that there was not much consensus as students had very different opinions.

" it was different because it was social work students, nursing students, and so on and we were all working from different perspectives and we were just thrown together,….and all our opinions at that stage differed and what I believed maybe the nursing students didn't agree or what I believed was best for the client they didn't agree"

"… I had that experience as well, especially there was a time we had to define what health is and we look at health from a different perspective, we look at a person's spirituality, you know, the environment and all of that but I think there was a sports student who was explaining health from their perspective and none of us agreed with it…even so we still regard others opinions"

Some students felt that it was a positive experience at the start as they learnt a lot. They had initially thought that when they entered university, it would be learning in their specific disciplines without interacting with other disciplines. They felt that it was a worthwhile interdisciplinary exercise even though they concurred with other students about the modules being boring and with limited practical application especially in the first years.

"I learnt a lot like……about…… the ethics and that stuff, that is really important in our job description"

"….. we went into these studies, into this direction with that image in our mind that we are not going to be engaging with community, with the bigger community, you know like it was going to be us with one patient and so on…we are not speakers so it opened us up, to like, how do I say uh uh we came out of our boxes so we learn how to speak in front of other people, we learn how to engage with other people, and so on but I must say sometimes it wasn't easy , especially first year, it wasn't we didn't like it much, it was a bit boring, it wasn't very interesting. But in second year, health promotion and when we actually started going to schools, that's when we started to like it but when we were in class talking blah blah and getting scenarios it wasn't nice but when we started going to school, we started to like it, like now like the situation now"

"… it was interesting for me, I mean like, in the group discussions you get various perspectives, so even like if it is one simple question, you got six different answers so it was good for me because you got to learn like from one basic question what the perspective was from people in the same room but studying different professions, I like that"

"…I am glad I went through that experience because it broadened up my view. To start with I came to varsity thinking I was going to study social work right and I knew a bit about social work and what I will be doing but to get to know what others will be doing from first year already,"

From the above quotations, students highlight the educative and interactive process of being grouped together with other disciplines. The students point out to the relevance of the content to their work, for example ethics, and also the usefulness of various perspectives (in this case other disciplines) in tackling health issues.

In this perspective the coordinator highlighted how the programme began. The coordinator, at the time, joined the interdisciplinary core course unit as it was called at that time in 2006, standing in for someone who was on leave. Interdisciplinary coordination involved liaising with different departments in the faculty to try and get

students placed and working in an interdisciplinary way. It also involved being responsible for modules, facilitating the course, meetings and administrative work. The modules covered included Primary Health Care in first year, Health Promotion in second year, Measuring Health and Disease in third year, which was run by the Dentistry Faculty with support from the Unit. A fourth module, Interdisciplinary Community Based Practice for the fourth year students, was developed with the aim of creating an opportunity for students to work together in practice. In 2007, the module was piloted in three underserved urban communities, which were close to the University; Delft, Mitchells Plain and Elsies River. In Delft and Elsies River it was located at a clinic and in Mitchells Plain at a community rehabilitation center. With support from the faculty funding, field workers and supervisors were recruited.

The course convenor also elaborated that the IPE programme was formed as a need for students to learn about other disciplines; the need for students to be more responsive to South African needs and also to be in line with the Primary Health Care approach. The convenor highlighted the importance of the IPE programme, but felt that it is done in isolation of other courses that students undertake and therefore students tend to forget about the content until they are in a situation where they need it. One of the informants also raised a concern by students, that when they are in the health care settings they do not necessarily come across what they learnt about collaborative practice among professions.

One of the lecturers, who had experienced the programme as an undergraduate student, had noticed improvement in terms of content and how the programme is presented. He regarded the programme to be good as it allowed students to experience the relevance of working within the team to provide quality care and exposes students to real issues.

One of the field coordinators described certain circumstances where some departments did not inform their students about the background of the community they would be working in or about past projects as highlighted below:

"handovers are supposed to take place here on campus; say previous group handover to the next group coming, that also doesn't take place, so ummm what some of the

supervisors have told us in the past that they would like for students' first experience to be their own without hearing anything from anybody; just experience the first day or two and make their own assumptions. But for me sometimes I feel that students should be briefed"

The field coordinator felt that students should be briefed and that handovers should take place on campus by previous groups to the next group. Their reason was that orientation to the different projects and at the sites takes longer than expected and the time becomes limited for the rest of the activities. For example, dietetics students are placed in the community for a week. If they arrive on Monday evening, their orientation took place on Tuesday and the group would be left with only three days for practice. This means that students are less equipped and have little time left to work on their projects. The course convenor mentioned that they have introduced a community walk for the HP. Students travel to the community a day before and visit the schools and the community to familiarize themselves with the area.

Another field coordinator mentioned that the programme is good and when he/she attended a conference in East London, he/she realized that the UWC programme is advanced in comparison to other institutions. The only real challenge he/she noted is that the departments were not sufficiently proactive and needed to work together. He suggested that if head of departments (HODs) would commit to sending their students for the programme, the placement would be beneficial. It would also be helpful, if departments could encourage regular supervision of students by the lecturers.

The initial experience of the students can be characterized broadly as students having limited knowledge or clarity on what they enrolled for or what was expected of them. This is confirmed by several students who expressed that their initial understanding of the programme was not clear as they did not receive proper orientation. As a result the students' attitude was characterized by a lack of interest in attending classes. One of the informants emphasized the need to clarify the purpose of the programme from the beginning to ensure that students are aware of their role at every stage. As Liakos et al, (2008) describes, the implementation of the IPE process is difficult and the initial

experience of students which is composed of difficulties in course organisation and clear guidelines has an implication for students' attitudes to the programme.

Therefore the accounts described above indicate that the initial encounter and orientation process needs to be improved to ensure successful implementation of the programme. This could be linked to the fact that there is limited buy-in from departments and if departments did fully support the process there would be more effort to ensure proper orientation of students.

4.4.1.1 Entry into the IPE programme

From the interviews and discussions conducted, there were significant differences in opinions with regard to the preferred level when the IPE programme should be introduced. Some students and informants felt that in the early years (first year of study), students had not fully understood their role for them to then engage and learn about other disciplines.

Third year student: *"I think the level. First and second year, the students themselves don't know what they are studying, you will be finding out yourselves so it's not very helpful, cause I am not going to learn Physio from a first year physio student, so it was very shallow at surface level. Whereas if we did it in postgraduate level, which would obviously be difficult and impossible but if we did, you have been studying for three years and now you are in honors and you going to start learning about other disciplines, it would be more constructive"*

Fourth year student*: 'I think now we are more mature to have a conversation about our professions constructively and with better information"*

One of the lecturers highlighted that the content of the modules is necessary but was not certain at what stage it should be introduced to the students. He/she felt that in the early years of study, students are trying to get used to their own expectations in terms of their profession. The lecturer elaborated that it was a challenge to motivate students to appreciate their role in terms of the content in the modules and for them to work in an interdisciplinary way. The lecturer suggested that IPE activities in the 1st and 2nd years

could be moved to one of the senior years of study, maybe 3rd or 4th year. However, the lecturer highlighted that changes are linked to the attitudes of the students themselves in ensuring an effective programme.

Some students argued that it would be beneficial to understand the other professions by beginning to interact with them as they develop their professions, from first year. This would allow students to begin their profession with a broader understanding that they would be working with other professions and on commencing second year they would not be isolated. This is supported from the literature by the argument that early entry is more beneficial in developing healthy attitudes towards working interprofessionally (Cooper et al, 2001). For example, Hoffman & Harnish, (2007: e236) stated that this discussion on entry into IPE is one of the greatest controversies facing health sciences educators. At the end they conclude that the next logical progression phase may be "the notion of instituting mandatory IPE for students prior to their matriculation in a health program".

However, given that at entry level students are all from different backgrounds and unclear about what the programme entails, this could also be a reason for seeing the programme as not making sense to the students. It is however important that at the beginning, course organisation should be clear to ensure that this does not reinforce attitudes of students who begin with a negative perception (Coster et al, 2008).

The key informants' responses gave a background to the IPE programme. It can be seen that UWC has made great efforts since 1999 to improve the quality of the programme and modules that would facilitate the IPE experience. A Unit dedicated to this process was established to liaise with departments and get students working in interdisciplinary ways. However, initial efforts to get unanimous support from departments have been a challenge.

Linked to the HP course, the convenor mentioned that they also enquire on the needs of the schools. In schools they are working with social and health committees to draw up different health promotion strategies. These committees consist of representatives from the schools and community. In the IPOC course, students have to find their own institutions to practice and some have gone back to volunteer in the same areas. This

issue points to the need for a detailed consultative process to ensure a structured programme and projects which are linked to the needs of the schools and community.

4.4.2. Insights and attitude to the programme

The findings give an insight into a shift of attitude, understanding and change of behavior from the initial experience to later years. The students pointed out that the situation improved when they learnt more in the second and subsequent years. They described that with time, they realized the importance of working as a team with different health professions as well as learning together, which they considered a result of the IPE programme. These findings are supported by literature which reports this positive shift. In their findings, Howden et al, (2011: 4) indicated that undergraduate health researchers reported a "positive shift in their views towards pre-registration IPE, related to its perceived value in equipping graduates for interprofessional practice". Students also realized the relevance of the content of the modules to their work, for example, applicability of health promotion to their health settings. A great number felt that the content needed to be revised to include sections which specifically nurtured learning about roles and responsibilities of other professions.

4.4.2.1 Understanding other professions' roles

The researcher found that due to the interactions that some students had with other disciplines in the designated modules it became clearer to them about other professions' roles and how their role was relevant in complementing their own to ensure holistic care.

"I enjoyed working with the different professions where we got to learn about exactly what other professions do"

"…also for referrals when you look at a child you know that this child requires an oral hygienist and not a dentist."

"…like the other said in first and second year it didn't make sense but now when you are in 4th year you actually realise the importance of an interdisciplinary team and working on the different health profession's role so you don't like overlap your role with someone else"

Everyone has a different thing that they do with the people, like a social worker can't do what the physiotherapist do. That is also important. It's important to have an interdisciplinary team for every profession to do their part"

The coordinator added that some students expressed surprise about the other professions roles and expressed many insights into the scope of other professions and the programme. Therefore, students often requested more time in the community to work in interdisciplinary teams, as highlighted by the coordinator in the quote below. The coordinator mentioned that the students often expressed that training should be interdisciplinary at all times and not limited to one discipline. He mentioned that generally students worked well and to a lesser extent noticed tensions between disciplines.

"…what always came out is that there was a request from students for more time in the community to work interdisciplinary. There were many realizations of the scope of the other profession and within the programme. Therefore students expressed that there is limited interaction. Students mentioned that this is how it should be all the time in our training and not limited to own discipline"

In contrast one of the groups mentioned that they did not necessarily gain an understanding of the other disciplines through the IPE programme but more through general interaction with people out of class. Their reason was linked to several factors which included the initial encounter which they felt was premature to introduce the IPE programme in the first year of study. They also felt that the structure of the modules did not necessarily include roles and responsibilities of different professions and the divisions into groups was not necessarily interdisciplinary as one or two professions would dominate.

"to be honest I think the way the IPE is structured now, I think it's more destructive than constructive because for the simple reason that people do click off in class like physio, dentistry, etc, they stay in their groups…..we are going to schools and we all have our groups but people sit in their disciplines and talk among themselves about people in their interdisciplinary groups….it's very destructive and again it's going to give an immature and imperfect perception of what each discipline really is about"

The researcher also concluded that instead of 3rd and 4th year placements, being involved in discipline specific projects, it would be beneficial to try and encourage interdisciplinary projects.

The students also expressed appreciation of the other professions' work. For example they described that they learnt a lot about the workload of the different professions and also the difficulty encountered in each profession.

Both field coordinators mentioned that students were accommodated together for the period of the placements and have time to interact even in the evenings. The students concurred with this as they mentioned that they would sit down and discuss projects at the house. A lecturer would come to the placement sites and do presentations on IPE to give them an insight on interdisciplinary work.

The students' knowledge improved after having gone through some of the modules of IPE and interactions with other students. There was clarity and a shift from the initial encounter to a better understanding of the programme objectives, increased understanding of the content and appreciation of other professions' roles. Through various interactions with other students, they began to understand the role of other professions in the health care setting within a holistic context in which their profession fits. This is supported by various authors who describe positive changes in terms of knowledge, skills and attitudes towards interprofessional work. This results from the greater level of interaction with the other professionals during the learning process which would not have been acquired in uniprofessional education (Liakos et al, 2008; Mendez et al, 2007; Cooper et al 2001). This is considered as one of the strong benefits of the IPE programmes. The key informants also confirmed this shift by relating that many of the students expressed this

realization, requested more time to work in an interdisciplinary way and that training should be interdisciplinary all the time. However it was also noted that students' negative perceptions can surface or be reinforced by a lack of clarity about the programme.

4.4.2.2 Understanding the importance of interdisciplinary/collaborative role

An understanding of the collaborative role is another crucial benefit highlighted by the students as they gained the recognition and understanding of both the exclusive and overlapping competencies evident within the caring/health care arena. The students gave different perspectives on the importance of interdisciplinary collaboration as highlighted by the following quotations:

"If you have one problem client and, that client can't be treated on one perspective, you need a physio, OT, for example if it's a stroke patient you will need a physio, OT, dietician, looking at something holistically"

"…but when you are in 4th year you actually realize the importance of an interdisciplinary team…."

"….through the courses I have a greater understanding of what others do within the team, so then even if we have one client we will talk and I know what the others like I know for example what the dietetics do……..I will know where they fit into the overall linkage"

Students mentioned that they became aware of what other professions do and this would assist them in providing better health care to the patients. For example, they mentioned the importance of referring patients to ensure holistic treatment. One student mentioned that when they are in blocks (practicals) they realize the need for other professions such as nurses, doctors, and social workers and they make recommendations for patients to see the different professions.

Students described that they were able to acquire skills that would help them to improve their assertive skills to approach and work together with other professions in health care settings. They also pointed out how the UWC IPE programme was like experiencing the "real world of work" as they were having a practical experience in the communities and hospitals. The researcher found out that the HP projects implemented by students in the schools assisted in building relationships among the different disciplines. Students planned and implemented projects together using their different skills and strengths as professions and therefore established trust amongst one another.

"I think that like as a profession in the health field, you need to be assertive enough to say or approach another profession and say listen this is the client's problem what can I do or what can you do to assist me or to assist you. So working together to achieve a big goal"

One field coordinator added that one of the advantages of the programme is that all disciplines can help each other as they live together, communicate with each other and get ideas of what they could possibly do in order to provide the best health care for the patients. He/she pointed out that there were some incidents of tensions among individuals of different disciplines but it all depended on the attitude of the individual.

"you know I think it's all depending on the adult, per individual, if you got this attitude that ummm, it's all got to do with individual attitudes, if I don't want to work with anybody else ummm, I am going to be one side, I will participate but I won't be in it fully because I would like to do something on my own"

The students gained the appreciation of collaboration with other professions on the ground. For example, at the schools project for health promotion when students were focusing on teeth, the dentistry students would conduct the lessons and when it was physical activity, the physiotherapy students would lead. Lecturers also observed that each discipline would stick to what they know from their discipline, especially topics that link with their discipline. This could be linked to the topics the students are given by the schools in line with the life orientation module. One of the lecturers expressed that it would be beneficial if the programme, especially the health promotion module, was more

structured towards community needs. It would benefit the students if they would work together with the schools to identify a need or needs which would bring the interdisciplinary team together. Therefore the issue may not necessarily be familiar to every discipline but they would work together with the community to try and solve it. This would solve the current situation in which health promotion is taught but students end up doing health education projects instead of health promotion projects. One of the factors mentioned that could encourage this collaborative role among the students is the need for students to tackle broader issues such as functioning of toilets or determinants of health. This would allow for students to work together so that no one would be at an advantage.

The students also mentioned that they received lectures in the field on the roles and responsibilities of other professions which were more beneficial in understanding their role. Whilst they were doing discipline specific projects in their placements they appreciated and began to explore collaborative work with other professions in the community, such as teachers in the schools they were working in.

Literature supports the fact that IPE is linked to fostering a collaborative role where students begin to appreciate and understand both the exclusive and overlapping competencies evident in the health area (Mendez et al, 2007) and therefore students begin to understand the importance of working together.

Whilst tensions were noted both in literature and in this study, in most cases respondents said these were linked to imbalances of numbers between the disciplines. One of the lecturers expressed that at times there were students who are arrogant and have lack of understanding of why they need to be there as they felt that the modules were irrelevant to them. The convenor also affirmed the notion of tension due to numbers in that at times there are students who can be overbearing due to numbers. For example, in classes the larger groups of students are nursing students.

"Basically we are preparing students for the open labour market; by equipping skills to work within a team and so that they are aware of other professions so that they can make proper referrals"

As in the quote above, the coordinator highlighted that the benefits of the programme were associated with preparing students for the open labor market as the programme equipped students with skills to work within a team.

This meant that recognition of future collaboration in the health care setting depended on the experience of the real world where they learn about their professional differences, strengths, problems and how to handle them. The benefits of the programme can be linked to a shift in attitude and insights towards collaborative practice not only during IPE at undergraduate level but also through an appreciation of other professions' roles in practice. As previous studies confirm, the IPE programme includes additional benefits related to applying what has been learnt to work and increased job satisfaction by working within a team (Mendez et al, 2007).

4.2.2.3 Best experiences

All the students described the HP module as the best experience they had. They stated that the module was practical and gave them the opportunity to work as interdisciplinary groups in schools. The students were able to work together and identify each other's strengths to implement the projects they had planned. They felt that the experience of working as an interdisciplinary group and making use of their different abilities brought a lot of satisfaction among the school learners as well as themselves. They therefore looked forward to going back to the schools. The following are quotes that describe how students felt:

".....because it's practical!!!"

"We went to the schools, we were doing and we worked on each other's strength and everyone knows their little bit, we worked on whole project"

"The way the children received us was quite nice and every week you would look forward"

One student described her best experience as the proactive manner of lecturing by one of the lecturers. The lecturer was described as being quite interested in the class which made

students enjoy the classes. The lecturer's approach ensured that everyone was attentive, participated and was motivated. However, she felt that there was a need for more assessment on the actual interdisciplinary interaction.

4.4.2.4 Importance of modules

The study also revealed the relevance of the content of the modules covered in the IPE programme. For instance, students described how they had understood the Ottawa Charter, which is covered in the HP module and used the information in writing their reports, as pointed out below.

"I think a lot of like the modules that we learnt in primary health care like the Ottawa charter and a lot of that stuff were helpful in what we like in occupational therapy like those modules we actually applied them last year for a lot of stuff like reports and stuff we had to write about clients and we had to use like the Ottawa charter…….yah It was quite beneficial to us"

The coordinator described that the modules are in line with the University policy which mentions an interdisciplinary approach and also with the National Health Act, 2004 which encourages collaboration. The modules developed for the programme are applicable to the health care setting and students confirmed how they had used the content in their work.

One of the lecturers found it easy lecturing the modules as he/she had gained knowledge from his /her work experience and qualifications. From the beginning of the course there was a need to describe expectations and explain the purpose of being in an IPE group and the reason that students from different professions need to work together. Group dynamics were said to be a challenge, but students needed to learn and tolerate and work with each other. The lecturers expressed that they received orientation on the course at

the beginning but both concurred that having gone through the Masters in Public Health assisted them to lecture and to understand IPE better.

The students felt that each of the modules needed to have more content on IPE especially on the roles and responsibilities of other professions. The convenor mentioned that the modules were going to be restructured but this would only come into effect in 2014.Parsell & Bligh, 1999 grouped some four key dimensions identified for positive outcomes for interprofessional learning which could be considered in the content of modules and learning as follows:

"1. relationships between different professional groups (values and beliefs people hold);
2. collaboration and team-work (knowledge and skills needed);

3.roles and responsibilities (what people actually do); and

4. benefits to patients, professional practice and personal growth (what actually happens)" (Parsell & Bligh, 1999: 96).

4.4.2.5 Benefits of the programme

The potential benefits of IPE as highlighted in the findings and in literature include a change in attitude of students to a more positive attitude when working in an interdisciplinary team and in a well-structured programme. As highlighted in the Framework for Action on Interprofessional Education and Collaborative Practice (WHO, 2010), health systems are often fragmented and struggling to meet unmet health needs. This situation presents IPE as an opportunity to strengthen future health workforce in a complex system. The Framework argues that interdisciplinary learning results in improved communication and more collaborative work as professionals in the health care setting work together with the community. This could potentially result in a strong health team that is aware of community needs and will be able to address health needs holistically. As with the example stated in the purpose of this research, a health team could work better with communities and other sectors to identify, plan and implement a comprehensive primary health care strategy to reduce malnutrition in children. This could also be applied for any other community need. Importantly health needs cannot be

addressed through a single physician-centered approach but an interprofessional approach in which personnel are aware of "different professionals' contributions to a healthcare need, and then integrate knowledge and skills to provide the most beneficial care to a patient or population" (Blue & Garr, 2007: 539).

Some of the additional lessons that students gained in the IPE programme included:

- Use of ethics of care in report writing;
- Personal growth as they gained confidence to interact and share knowledge; assertiveness;
- Patience and compromise especially when dealing with other disciplines; and
- Communication skills improved.

One of the field coordinators pointed out how the programme makes a difference giving an example when physiotherapy students managed to make a manual for home based carers. The purpose of the manual was to assist home based carers with guidelines on mobility of patients who could not assist themselves.

Having been exposed to the programme, one of the lecturers pointed out that it helped him to share issues with the other professions when he began working. The other lecturer regarded it as a worthwhile exercise which was very beneficial but felt that the way it is run should be reviewed. The lecturer suggested that the review should focus on the interdisciplinary groups and the level at which the IPE is introduced.

The research revealed that the programme was successful as it involved community members in the programme development thereby meeting community needs. The coordinator explained that through the IPE programme, invitations would be extended to the community to give input into the modules. A formal partnership exists with the community and their members are present at every discussion and give input. At the end of the term, when the students present their work, the community is invited to see what students have done and give their own input. This is then captured and is given to the next group of students even though there are challenges of handing over of projects, as

stated earlier. The coordinator also attends meetings in the community such as health committee meetings. This process seemed to be unique at UWC as there was no literature found to confirm such a process elsewhere.

4.4.2.6. Challenges/structural difficulties of IPE

As described in the literature review by Liakos et al (2008), implementing IPE is a profoundly difficult process to achieve. The researcher also found that there were some external and internal factors that were associated with coordination and implementation of the programme.

4.4.2.6.i. External factors

The external factors which make the implementation of the IPE programme difficult are sometimes unexpected. For example, as a result of the teachers' national strike of 2010, students were unable to finish off their plans as the schools had to be closed. The students were not informed on time of this strike and this affected implementation of projects. All the preparations for their sessions were not implemented, thus affecting the sustainability of the projects and their learning within the schools.

Students also raised the issue of safety in the placement sites as highlighted by the quote below. They felt that the university needed to increase safety measures when students visited communities.

"When we got off the bus, there were kids walking with knives and we had a pregnant woman. There is not enough safety when you go to communities!!"

4.4.2.6.ii. Internal factors

The internal challenges found can be categorized into the following: logistics of the programme, lecturing process, venue and communication.

a. Logistics of the programme

The students felt that the composition of the groups into interdisciplinary teams was not appropriate. The students pointed out that most groups would have a majority of one

discipline which resulted in one discipline dominating in the group. For example, they related that the majority of students in class are nursing and social work students. This was also supported by the lecturers and convenor with regard to overbearing students as a result of more numbers than in other disciplines.

"....I was the only OT in my group... you couldn't understand; it was challenging"

"Another big problem, for example, maybe they were more Physios than other disciplines so it was quite easy that certain disciplines to dominate in discussion and in groups as well. You could have dietetics, psychology and three physios in a group, so it was quite a challenge.

Some students felt that the failure to balance the number in terms of disciplines in the groups did not have a positive effect and as a result the programme did not necessary achieve the end result of interdisciplinarity. Discussions were shallow in that regard as there was not enough engagement in that field.

The students also pointed out that the different time tables of the disciplines influenced the process of working together in an interdisciplinary team. It was therefore a challenge to set times out of class time to discuss projects. It was also very difficult to arrange time to meet after classes because some students stay off campus and would miss their transport if they stayed to do group work. Therefore, a few students or one within the group would end up doing the work. This placed a lot of strain on those students and led to lack of collaboration. One student describes the experience as their worst as highlighted below:

"ahhh, I think my worst experience was when we were in a group and it was me(OT student) and three nurses and no other profession and at the end of the day myself and one of the nursing students had done all the work and the other two were like now we are finishing , why didn't we involve them and at the end of the day they didn't come and ask what can we do, it's not my role to go to them and say listen you do this you do that....."

The field coordinator also confirmed this, describing that they had been trying to get the different disciplines working together on one project, but the different blocks made it impossible to have different disciplines working together. As a result the field coordinators identified projects that they would like to be sustained, rather than in the

past when students chose what to do. To ensure continuity students would be given options of the existing projects.

The coordinator reiterated that it was difficult to organize a common timeframe for the different disciplines to meet. For example, the occupational therapy department placed students in the placement sites for seven weeks, physiotherapy for four weeks, psychology one day and natural medicine for two days and therefore it would be difficult to arrange a common timeframe. He also added that transport was a logistical problem in terms of organizing students to be transported back and forth to different project sites.

One of the field coordinators felt that the university needed to involve communities more and for the projects to be in line with community needs. The field coordinator expressed concern that even though there are community engagement officers at the UWC, they are not visible to the communities. The suggestion was that these officers should play a critical role in working with the ITLU and service learning departments on community engagement. The officers should help in convincing departments to prioritise the programme and develop a coordinated strategy to regularly send students to placement sites. This supports the earlier argument by the lecturer that if students engage in proper projects (which are in line with community needs) this would result in better involvement of community.

The field coordinator described that at the sites, at times it would be difficult to work with the community members as some of the community members have to go to their respective workplaces and have other commitments. To improve the situation the recommendation was that once the students identified people to work with, they could sign a commitment to participate in these projects.

b. Lecturing Process

The students described that one of the difficulties in the lecturing process is that there is only one lecturer selected per department for lecturing. They said that this influenced the IPE process as not all lecturers understand the in-depth role of other disciplines. As a result lectures were based on the lecturer's department's perspective. For example, there would be a lot of reference to the role of one discipline e.g. the occupational therapist in a particular situation and no mention of what other disciplines would do. The students also described that there had limited motivation from the lecturers to gain interest in the modules and attend classes.

"If it wasn't compulsory I wouldn't attend"

Lack of motivation by lectures was highlighted in most groups and it presents a major issue as it influences the attitudes of the students. Students said that in cases like that they would then take a back seat since there is not much engagement with other disciplines. Horsburgh, Lamdin & Williamson, (2001: 877) expressed that "interprofessional learning is an educational process through which students are provided with structured learning opportunities for shared learning". They said that the goal of such learning is to enable learners to acquire knowledge, skills and professional attitudes which they would not be able to acquire effectively in any other way. It is therefore important that interprofessional learning nurtured within the lectures to obtain positive outcomes.

Specifically with the health promotion module, the lecturer expressed concern in that they teach health promotion but end result in the school is health education. Students are asked to link their projects to the life orientation module in the schools. The lecturer felt that topics that they are given are often abstract and do not necessarily give space for students to practice what they have learnt.

Another challenge highlighted by the coordinator was that supervision is not consistent and the same among departments. Some departments have supervision once a week and others once a month. It presents as a challenge as interdisciplinary teaching requires regular supervision. To improve the process the coordinator recruited supervisors, mainly postgraduate students, who would be present once a week to facilitate the students to work in an interdisciplinary way and also to have reflective sessions after any

interventions. In the beginning of the year, a workshop on supervision is held to improve the process.

The field coordinator described that their role includes seeing to the accommodation of the students, driving them around the different project sites, providing assistance to students on the projects, linking students with contacts such as the town councilor, principals and teachers as they are involved in three schools at the moment. They work to keep this link open and also work to get the different disciplines working together on one project. However, they pointed out that due to the different blocks/time schedules, it is not always possible to have students working on a project together as one.

The other issue mentioned was the conflicting experience in terms of IPE. Others would refer to it as multidisciplinary instead of interdisciplinary. There is a lack of shared vision among departments on the programme. A faculty workshop was held to address some of the issues and it was a good opportunity for people to give input.

The coordinator also highlighted the limited resources for the programme which had not improved as follows:

"Resources are also a constraint; we need to employ supervisors; we also need equipment to use at the sites but there is no budget and have to use from what is existing"

Another issue raised by some of the students was the inconsistency in the lectures. Students described that they felt that the lectures were unstructured with no standard format. This is well illustrated from a quotation of one student of their experience in the first year:

"It was really a struggle in our 2nd term first semester we had PHC, the organisation of that module for us, was unstructured. I am pretty sure we had different experiences of that module depending which lecture you were in. ….i felt it was unfair when it came to assessment and exams because we all had different lectures with different backgrounds"

The convenor also confirmed that they are looking at restructuring courses but only in 2014 to make each course a semester long. The idea was that there is a need to

incorporate more social issues and use examples that students can relate to instead of broad abstract concepts. Whilst the students expressed that there was need for lecturing with emphasis on roles of each discipline, the convener expressed that the assignments always ask what your role is and that of the other discipline but lecturers had to practice caution in the first year as students are not aware of much of their professions. Workshops are conducted with lecturers for orientation but at times not all lecturers attended which the convenor mentioned was very disappointing. The convenor had received reports from students that the lecturers did not stay long or would leave early without engaging. This has an impact on the course work mark. Although a lot of lecturers did show what they had done there was need for greater engagement as the role of the lecturers is very important in nurturing interdisciplinary learning. The internal factors which are a barrier to effective interdisciplinary learning are linked to logistics around trying to set up interdisciplinary groups as most lectures may be dominated by one discipline. The different timetables among the departments play a significant role in this perspective as there is not a specific time within the faculty dedicated to the process for all departments. Horsburgh et al (2001: 877) confirm these findings in the work by stating

"The many difficulties in shared learning are documented. These include timetabling difficulties, discrepancies in numbers of students from the different student groups, contrasting learning and assessment methods, different curricular lengths, lack of commitment, planning and resource difficulties, such as lack of small-group space, and so on. All of these surfaced as we began planning how to achieve multiprofessional learning opportunities…."

The lecturing process difficulties can be linked to not clearly having the same vision towards IPE, lack of orientation and staff specifically employed for the programme. Therefore, it could be seen as an extra load for existing staff. The lack of orientation of lecturers can be linked to students' perceptions that in most cases lecturers may be oriented to their discipline and give examples of their discipline as they are more abreast with the discipline than the other disciplines.

Factors which would need to be considered to encourage interdisciplinary learning include; the role of the lecturer, proper division of groups, proper projects which address community needs, assessment of interdisciplinary interaction, more content or practical work on roles and responsibilities of disciplines, a more standardized format in lecturing and attitude of students.

c. Venue

To a lesser extent, the venue presented challenges for students to be able to present their work. They reported that in some instances they would be placed in prefabs which had no technology and were therefore not able to use power point presentation. It was difficult to use the lecturer's laptop and also risky to ask the Information Technology (IT) persons from their departments. They had to resort to posters and fliers which they mentioned affected their performance as other groups had the relevant technology.

d. Communication

Students related that at times they were not informed timeously about the schools activities. For example, they had gone ahead to prepare for their projects and were not informed on time that that they would not go to the schools due to the teachers' strike. They also mentioned that at times they received information on activities late such as the World Café, a workshop set for students' project presentation. At times information was conveyed from other students not from the lecturers. They expressed that there was a need for an updated mailing list so that students are aware of critical information timeously. The mailing list should also extend to the lecturers because at times the lecturers would also not be aware.

As has been described in literature, structural differences, lack of adequate human resources, complex communication demands among other issues can make implementation difficult (Gilbert, 2005 as cited by Liakos, 2008). In many cases this causes many challenges and this is not exceptional to the UWC IPE programme. The main challenges are faced internally as the external factors such as strikes and community safety are beyond the university's control.

4.5. General Recommendations

The following recommendations were suggested by students and by the key informants to contribute in improving the IPE programme:

4.5.1 Recommendations by students

- There should be efforts made to improve the content of classes/lectures so that there are more practicals and interactive sessions. Lecturers can draw on the different disciplines' strengths in a group and ask them to tackle a problem within the community. They could use video clips, role plays and debates to make the lectures more interactive.
- Lectures could be made interdisciplinary by having more than one facilitator/lecturer drawn from different departments in the faculty.
- The health promotion module could be used as an example of a module with practical interdisciplinary interaction.
- The ITLU unit should have a regularly updated mailing list to keep students informed of any activities linked to the programme.
- There is a need for a standardized format for the IPE lectures for consistency in the lectures, assignments and therefore achieving fair assessment of students. Students suggested that if possible lecturers could meet often to discuss content.
- There is a need for more practical work as interdisciplinary groups and to learn about other professions. An example would be to organize a visit to a setting where one can learn about a discipline- "A day in the life of a Physio".
- The timing could improve by having lectures of the first two modules held in the morning. A 10min break could be introduced in between the two hour lectures, or to shorten the time.
- There is a need to improve the lecture style so that lecturers do not read from handbooks.
- Lecturers should have an orientation on IPE goals.
- There is a need for additional interdisciplinary courses.
- Another suggestion would be for every discipline to do the modules on their own disciplines in the first year and in the second year combine disciplines.

- In the 4th year there is a need for another subject placing students as interdisciplinary teams in a health care setting so that they can elaborate what they learnt over the past years and elaborate on their disciplines.
- There is a need for supervisors or lecturers to have good communication skills to encourage group interaction and avoid disciplines remaining in their own small groups.

4.5.2 Recommendations from informants

- There is a need to organize a strategic meeting to develop a faculty plan which reflects all departments' perspective.
- To ensure successful implementation of the programme there is a need for commitment from all departments in the faculty of CHS.
- Students need to be made aware of the relevance of the programme and this can only take place if there is a buy-in from all the departments in the faculty.
- It must be compulsory that lecturers attend training and orientation as this is the platform for sharing methodologies.
- The programme should carry some form of credit as students do not regard it as important as compared to other courses.
- A budget is needed for the programme to cater for printing manuals, supervisors and transport.
- A shared vision by all the departments within the faculty is needed and is critical.
- The IPE programme should be extended to other universities so that even if UWC students cannot place students in communities, other universities can place their students.
- A suggestion was made to introduce a block which could be a week or two for the students to work together on an interdisciplinary project.
- During lectures it is useful that lecturers should put more emphasis on purpose of the course and the attitudes of the health professionals so that it may have an influence on the way professionals practice in future.
- There is a need for motivation and appreciation of the field coordinator's role from the management.

- Students should engage in more concrete projects (health promotion projects not health education) that are not guided by the life orientation curriculum. This would involve looking at real issues and more involvement of the schools, for example students can organize projects to ensure well-coordinated sports grounds or sport with intersectoral collaboration to make it more long term.
- The coordinators and course conveners should offer more support to the lecturers.
- The School of Public Health short courses are useful in preparing for lecturers for the IPE modules.
- Sessions should be organized to contribute to the content of the modules so that lecturers are on the same level and students can have the same material (standardization).
- There is a need for the UWC to visit the communities at least three times a year so that the lecturers understand the context and also to identify community needs as students interact with community.
- There is a need to actively engage with communities in order to enhance partnerships, for example, assist with staff development, and school health committees. There is a need for UWC community engagement officers to play an active role in supporting the programme.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

This chapter sets a conclusion and recommended actions that might be taken to improve the current IPE programme at UWC. It also includes a summary of the findings.

5.1 Summary of findings

The students involved in the IPE programme had both negative and positive experiences as part of the interdisciplinary learning and practice. The results show that students appreciate the value of the programme but a lot of changes need to be done to ensure an effective programme. The interdisciplinary interaction through learning and working together specifically in health promotion resulted in creating a deeper understanding of the exclusive and overlapping role of health professions as well as an appreciation of each other's profession.

Firstly, it is evident from these results and from literature that if there is lack of clarity of the programme or unclear course organisation it leads to or reinforces negative perceptions of students towards the IPE programme. Secondly, as supported by literature there is still a debate among people if it is beneficial for early entry into the IPE programme or at a later stage when students are more aware of their own profession. As results show, there was a shift in attitude by the students over the years towards a more positive/healthy attitude and a greater interest to be in the IPE programme. There is a need to do further investigation on the best level for entry into IPE.

The results brought out the importance of IPE as there were a lot of benefits associated with the programme. Firstly, students expressed a realization and appreciation of the other profession's role by having an interdisciplinary association with other professions. Secondly, having understood or learned about the other professions gave them an insight into the importance of team work (collaboration) among professions. This also points to the fact that the programme is very useful in building skills among students as it gives them a practical experience before the real world to engage with other professions. As a

result, students build more personal skills such as confidence, patience, communication, assertiveness and team work. Thirdly, the students highlighted the relevance of the modules of the IPE programme in their day to day work as the programme provided an opportunity to apply theory to work. However, it came out clearly that the modules needed to be more practical, citing the example of the Health Promotion module as a practical module. There was a clear need for the modules to have more content on roles and responsibilities of other professions.

It is however clear that it is not easy to implement the IPE programme as evident by the challenges faced in the UWC IPE programme. The first aspect is the logistical issues in running the programme - linked to the different time frames of departments, inadequate orientation of the students and lecturers, inappropriate selection of interdisciplinary groups, lack of a budget dedicated to the programme, limited venues for students and lack of communication when activities take place. The second aspect is linked to the lecturing process. The study brought out that having one lecturer from the department affects the interdisciplinary learning as there is constant reference to one discipline. Therefore there is need for regular orientation on IPE goals.

The results also highlighted that students reported back informally that they did not necessarily encounter what they learnt in the real world. There is no formal system to obtain feedback from alumni of the programme regarding their experience in the real world.

5.2 Conclusion

This study explored the insights of the current third and fourth year undergraduate CHS students involved in the IPE programme regarding their appreciation of the other students' profession and their attitude to future interdisciplinary collaboration. The objectives of the study were as follows: to explore the experiences of students with regard to interprofessional work; to explore the extent to which the IPE programme provided students with an insight into the role of and association between their profession and

other health professions; and, to explore the extent to which the IPE influenced students' attitudes towards collaboration in future work.

It was clear from literature that despite increasing recognition of the importance of IPE, little is known about where in the world it occurs, how it is conducted and why it is offered by other institutions. As such the present study has attempted to contribute toward an understanding of the insights of students that experience the IPE programme and how the programme is conducted at UWC. In this regard, a qualitative study using focus group discussions and semi-structured interviews was suitable to explore these insights.

The study gave an insight into students' interaction with other professionals and how this has an impact on future collaboration. It highlighted that exposure of students to interdisciplinary learning can have a positive impact in professionals learning about each other's professions and therefore allowing a change of attitude towards a holistic and more collaborative effort towards patients care. This is one of the aims that policies are attempting to achieve, that is, to enhance collaboration which will reduce duplication of effort, and make better use of scarce resources more effectively, so as to meet the complex needs of patients. However there is need for a well -coordinated programme which takes into account the input of all sectors involved (students, lecturers, supervisors, departments, community and other partners).

The researcher anticipates that the findings of the study could add to the bigger study coordinated by CHEER which could be a useful resource by other institutions such as universities or colleges training health workers, who are implementing the IPE programme or those who intend to; other faculties within the institutions; policy makers such in the Ministry of Health and other institutions which may find the programme useful.

5.3 Limitations of the study

The main purpose of this study was to explore the insights of the current third and fourth year undergraduate health science students at UWC involved in the IPE programme regarding their appreciation of the other students' profession and their attitude to future interdisciplinary collaboration. Whilst the research process yielded several positive findings, there were some difficulties that limited the findings of the study. The findings of the study could have benefited from all the disciplines but this proved impossible due to blocks and different timetables for department. The researcher had to conduct data collection in different time periods to obtain an adequate sample and this could have had an impact on findings.

5.4 Recommendations for the programme and future research

The findings of the study did not only highlight challenges but an opportunity to improve the programme and avenues for future research.

5.4.1 Programme

The researcher recommends that the faculty should consider introducing a monitoring and evaluation system to monitor and guide them over the next five years on the structure of the programme so as to allow for more time for practical interdisciplinary interaction and also to be guided on the level of entry to introduce the programme. Secondly, it would be beneficial that lectures should be facilitated by an interdisciplinary team so that the programme does not have one discipline's view. Whilst it might be difficult to have such as a team in the beginning it is highly recommended that the lecturers currently involved in the programme should have orientation which is adequate to ensure that IPE goals are realized.

Importantly, the researcher acknowledges that the UWC IPE programme has made great strides. It is important that all successes and challenges should be documented to showcase what UWC has done but also to assist in recommending to other institutions this valuable programme and how it works at UWC.

A shared vision within the faculty is needed and arrangements such as venue, time schedules and assignment groups, training of lecturers are catered for within a shared plan.

A budget should be allocated for the programme so that it can cater for logistics such as transport, equipment.

It might be important to create an alumni database and get feedback on how students have experienced the real world in light of having gone through the IPE programme.

5.4.2 Future research

Further research should be conducted using similar objectives and extending to all the disciplines in the faculty.

The study also highlighted the difficulties of a buy-in of the programme by all departments. Research should also look at a baseline focusing on departmental perspective on IPE and structural differences that would be linked to course organisation.

There should be further research to explore the appropriate level for entry into the IPE programme.

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ANNEXURE A: Focus Group Schedule for students

(Record the number of students and the disciplines present)

The following is a schedule to guide focus group discussions with students involved in the IPE programme. The purpose of the research project is to explore the insights/perceptions of students with regards to interprofessional work and their attitudes towards future joint or collaborative work in the health care setting. The discussion will be audio-taped (optional), therefore it will be helpful if you speak one person at a time, clearly and with more volume for your comments to be captured and ensure high quality transcription.

Studies at UWC

1. Tell me about your studies at UWC. What do you do?

The experience of participating in the IPE programme

2. Tell me about your initial experience of joining the IPE programme at UWC

3. For how long have you been involved in the programme?

Insights and Attitudes

4. What is your understanding of Interprofessional education from the experience you have had in the programme?

5. What has been your experience being an IPE team within the assignment groups?

6. What are your perceptions of the IPE programme as undertaken in this institution?

7. What is your attitude towards working together as a group in the placement settings?

8. What are your insights in terms of collaboration and interprofessional team work with other students?

9. Do you feel that you have gained more understanding of your role and that of other professionals having gone through the programme? Probe

10. What would you say has been the best thing about your experience in the programme?

11. What would you say has been the worst experience in the programme?

12. With this unique experience of interprofessional work, describe the lessons that you take with you from the course into the world of work.

13. What is your attitude towards future joint work or collaboration with other professionals after finishing your programme?

Benefits

14. What is your view of the benefits IPE to

a. the patients/community members
b. professional practice
c. to your personal growth

Recommendations

15. In the view of your insights and attitudes towards the IPE programme, what would you recommend to improve the programme?

16. Is there anything else that you would like to share which we have not discussed?

End, thank you!!!

ANNEXURE B: Information sheet for students

Project Title: The insights and attitudes of students in the Interprofessional Education programme at the University of Western Cape

What is this study about?

This is a research project being conducted by Linda Mashingaidze, a student at the University of Western Cape, School of Public Health. I am inviting you to participate in this research project because you have been identified as a key person/partner involved in the Interprofessional Education programme within the university. The purpose of this research project is to explore the insights of the current third and fourth year undergraduate health science students involved in the IPE programme regarding their appreciation of the role of and association between other students' profession and their profession and their attitude to future interdisciplinary collaboration.

What will I be asked to do if I agree to participate?

You will be asked to relate your opinions on the IPE programme in terms of the programme, students, supervisors and the lecturers of IPE and we request about 45 – 60 minutes of your time. The focus group discussion will be guided by a series of questions under the following headings (please see the attached questionnaire for more detail).

1. Experience of the IPE programme
2. Insight into role of and association between their profession and other professions
3. Attitudes towards collaboration in future work

You will be asked to participate in a focus group discussion (FGD) with other students you were involved in the programme. The information that you will relate in the group discussion will not be used outside the FGD and each group member will be asked not to use the information outside the FGD and sign a consent form, if they agree to participate in the study.

Would my participation in this study be kept confidential?

I will do our best to keep your personal information confidential. To help protect your confidentiality, I will use identification codes only on data forms, and use a password-protected computer file. This will be conducted in the following manner:

(1) Your name will not be included on the surveys and other collected data; (2) a code will be placed on the survey and other collected data; (3) through the use of an identification key, the researcher will be able to link your survey to your identity; and (4) only the researcher will have access to the identification key.

If I write a report or article about this research project, your identity will be protected to the maximum extent possible.

What are the risks of this research?

There are no known risks associated with participating in this research project.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about students' insights and attitudes of IPE which would assist in recommending improvements to the programme. We hope that, in the future, other academics might benefit from this study through improved understanding of how the faculties / departments need to structure their programmes in order to ensure that students are well equipped during their academic years, to work more effectively as graduates in the health care settings and improving health status of communities. .

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being coordinated by Prof. Ratie Mpofu at the University of the Western Cape. If you have any questions about the research study itself, please contact _Prof. Mpofu at: University of Western Cape, Faculty of Community and Health Sciences, Private Bag X17, Bellville, 7535 or contact number +27 21 959 2631 or e-mail rmpofu@uwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Faculty of Community and Health Sciences:

Prof. R. Mpofu

University of the Western Cape

Private Bag X17

Bellville 7535

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

ANNEXURE C: Information sheet for key informants

Project Title: The insights and attitudes of students in the Interprofessional Education programme at the University of Western Cape

What is this study about?

This is a research project being conducted by Linda Mashingaidze, a student at the University of Western Cape, School of Public Health. I am inviting you to participate in this research project because you have been identified as a key person/partner involved in the Interprofessional Education programme within the university. The purpose of this research project is to explore the insights of the current third and fourth year undergraduate health science students involved in the IPE programme regarding their appreciation of the role of and association between other students' profession and their profession and their attitude to future interdisciplinary collaboration.

What will I be asked to do if I agree to participate?

You will be asked to relate your opinions on the IPE programme in terms of the programme, students, supervisors and the lecturers of IPE and I request about 45 – 60 minutes of your time. The focus group discussion will be guided by a series of questions under the following headings (please see the attached questionnaire for more detail).

1. Background and Experience of the IPE programme
2. Your opinion of the students' role and association between their profession and other professions
3. Attitudes towards collaboration in future work

Would my participation in this study be kept confidential?

I will do my best to keep your personal information confidential. To help protect your confidentiality, I will use identification codes only on data forms, and use a password-protected computer file. This will be conducted in the following manner:

(1) Your name will not be included on the surveys and other collected data; (2) a code will be placed on the survey and other collected data; (3) through the use of

an identification key, the researcher will be able to link your survey to your identity; and (4) only the researcher will have access to the identification key. If I write a report or article about this research project, your identity will be protected to the maximum extent possible.

What are the risks of this research?

There are no known risks associated with participating in this research project.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about students' insights and attitudes of IPE which would assist in recommending improvements to the programme. We hope that, in the future, other academics might benefit from this study through improved understanding of how the faculties / departments need to structure their programmes in order to ensure that students are well equipped during their academic years, to work more effectively as graduates in the health care settings and improving health status of communities. .

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is part of bigger study being coordinated and headed by ***Prof. Ratie Mpofu*** at the University of the Western Cape. If you have any questions about the research study itself, please contact _Prof. Mpofu at: University of Western Cape, Faculty of Community and Health Sciences, Private Bag X17, Bellville, 7535 or contact number +27 21 959 2631 or e-mail rmpofu@uwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Faculty of Community and Health Sciences:
Prof. R. Mpofu
University of the Western Cape
Private Bag X17
Bellville 7535
This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

ANNEXURE D: Semi-structured interview schedule

Thank you for agreeing to participate in the research. I have earlier sent an information sheet and consent form which gives an explanation of the purpose and process of this interview. I kindly ask once you have read the information sheet and have understood, to sign and send me the consent form.

Introduction

The University of Western Cape has been involved in the interdisciplinary programme for several years and has been placing students in the community as part of the programme. The main purpose of this interview is to obtain background information of the programme and an understanding of the process put in place for students to learn interdisciplinary.

The discussion will be prompted with the following questions:

Role at UWC

1. Tell me about your role at UWC, what do you do?

IPE Background information

2. Are you familiar with how the IPE/Interdisciplinary programme started at UWC?
3. What has been your role, involvement and experience in the programme?
4. In your opinion, how would you regard the IPE programme that is delivered in this Institution?

-What are the benefits / what are the disadvantages?

-What are some of the challenges experienced in lecturing an interdisciplinary group.

5. Do you find it easy to lecture the modules in the programme?
6. What are some of the challenges that you encounter?
7. What are your expectations of the programme?

Student learning

8. How would you describe the interaction and role of the students as they learn interdisciplinary?

-What are some of the Challenges?

-What factors in the programme do you think would encourage students to learn more about the other disciplines and their own?

Recommendations

9. In view of your experience what would you recommend improving the programme? with regard to the students?

With regard to the teachers?

With regard to community involvement?

10. Is there anything else that you would like to share which have not discussed?

ANNEXURE E: Consent form

CONSENT FORM

Title of Research Project: The insights and attitudes of undergraduate health science students in the Interprofessional Education programme at the University of Western Cape

Date:

Interviewer:

UWC Student no:

Tel: _____ Fax: _____

E-mail:

Interviewee's pseudonym:

Place at which the interview was conducted:

Thank you for agreeing to allow me to interview you. If you have read the information sheet which explains the purpose of the study, you are asked to give your consent to me on tape and by signing this form when we meet to conduct the focus group discussion or interview**.**

1. Information about the interviewer

I am Linda Mashingaidze, a Master's in Public Health student at the School of Public Health (SOPH), University of the Western Cape. As part of my Masters programme, I am required to conduct a study in partial fulfillment of the programme. I will be focusing on the insights and attitudes of undergraduate health science students involved the Interprofessional Education Programme. I am accountable to Prof. D. Sanders who is contactable at 021 959 2911 or c/o SOPH Fax: 021 959 2872 and Prof R Mpofu by e-mail at sandersdav5845@gmail.com and rmpofu@uwc.ac.za .

2. Purpose and contents of interview

The purpose of this research project is to explore the insights of the current third and fourth year undergraduate health science students involved in the IPE programme regarding their appreciation of the role of and association between other students' profession and their profession and their attitude to future interdisciplinary collaboration. The focus group discussion will discuss questions related to your experience, insight and attitude as a person involved in the IPE programme.

3. The interview process

The focus group discussion will take between 45- 60 minutes. I will be asking you questions related to the IPE programme. The discussion will be taped and therefore ask for your consent with regards to taping the discussion**.**

4. Anonymity of contributors

At all times, I will keep the source of the information confidential and refer to you or your words by a pseudonym or invented name which I would like you to choose. See name above. I shall keep any other records of your participation locked away at all times, and destroy them after the data has been collected.

5. Things that may affect your willingness to participate

If there is anything that you would prefer not to discuss, please feel free to say so. I will not be offended and there will be no negative consequences if you would prefer not to answer a question. I would appreciate your guidance should I ask anything which you see as intrusive.

6. Agreement

6.1 Interviewee's agreement

The interviewee will be asked to give his/her consent below.

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I

understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

6.2 Interviewer's agreement

I shall keep the contents of the above research interview confidential in the sense that the pseudonym noted above will be used in all documents which refer to the interview. The contents will be used for the purposes referred to above, but may be used for published or unpublished research at a later stage without further consent. Any change from this agreement will be renegotiated with you.

Signed by interviewer:

Signed by participant:

Date:

Place:

Study Coordinator's Name: Linda Mashingaidze

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-3985

Cell: 083 559 2523

Email: 2948252@u2wc.ac.za or tinengoni@gmail.com

ANNEXURE F: CHEER Questionnaire

The impact of Collaborative Interprofessional Education and Practice on developing socially responsible graduates who are well equipped to practice in rural and underserved areas

QUESTIONNAIRE

ID Code:

Demographic Data

1. Department in the Faculty of Community and Health Sciences

1. □ **Social Work**
2. □ **Occupational Therapy**
3. □ **Physiotherapy**
4. □ **School of Nursing**
5. □ **Sports and Recreation**
6. □ **Dietetics**
7. □ **Human Ecology**
8. □ **School of Public Health**
9. □ **School of Natural Medicine**
10. □ **Psychology**
11. □ **Other (Specify):**

2. Admission/Entry Scheme

1. □ **Bursary student**
2. □ **International student**
3. □ **South African fee-paying student**
4. □ **Other (specify):…….**

3. Bursary or Grant

Do you hold a bursary?

1. None **2. Yes**

If yes please specify name of grant: ……

4. Place of Birth

1. Western Cape 2. Eastern Cape 3. Northern Cape 4. Gauteng
5. Limpopo 6. Free State 7. Kwazulu Natal 8. Mpumalanga
9. North West 10. Country other than South Africa: Please specify:…….

If not from South Africa: Please indicate year of first arrival in South Africa: ……

5. Gender
1. Male **2. Female**

6. Date of Birth
/ /
D M Y

7. Citizen/ residence indicator
Are you:
1. South African citizen (including South African citizen with dual citizenship)
2. Temporary entry permit
3. Status other than one of the above: Please specify:……

8. Language

Do you speak a language other than English at your permanent address?

1. □No 2. □ Yes (Please specify)……..

9. Rural/Urban Background

9.1 Over the last twelve years. How many years has your principal home address in South Africa been outside an urban area?

Number of Years:

9.2 Please indicate the type of community you have lived in the longest within South Africa

1. □ Urban town

2. □ Rural town

9.3 Do you consider yourself to come from a rural background?

1. □ Yes 2. □ No

10. Previous tertiary education (If applicable)

Please list the details in the table below if you have completed a University degree(s)

Name of completed degree(s)	Year of Completion	Name of University
1.		
2		
3.		
4.		

11. Your Marital Status

1. □ Single **2. □ Divorced/ Separated**

3. □ Married/Living with Partner **4. □ Widowed**

12. Dependants (if applicable)

12.1 Number of children under 16 years of age: …….

12.2 Number of other dependants for whose care you are financially contributing:……...

13. Source(s) of income support (please select as many responses as necessary)

1. □ Government assistance

2. □ Supported by parents

3. □ Currently employed on a part-time basis

4. □ Grant/bursary

5. □ Financially independent

6. □ Other (please specify):

……

……

……

14. Preferred location of future health care practice

On completion of your basic undergraduate health science degree, where would you most like to practice? Please answer as follows:

14.1 Please indicate in which province or country other than South Africa (You may rank 3 options)

1. □ Western Cape **2. □ Eastern Cape** **3. □ Northern Cape**

4. □ Gauteng **5. □ Limpopo** **6. □ Free State**

7. □ Kwazulu Natal 8. □ Mpumalanga 9. □ North West

10. □ Country other than South Africa (Please specify):……

14.2 Please indicate in which kind of community within South Africa or country other than South Africa

1. □ Urban based community

2. □ Rural based community

15. Preferred type of future health care practice

Please answer questions as follows.

15.1 When you have completed your basic health science degree, what area within your discipline are you most interested in pursuing? (Please select your top three responses)

1st preference _____

2nd preference _____

3rd preference _____

16. Year of your health science studies:

1. □ 3rd 2. □ 4th 3. □ 5th 4. □ 6th

17. Have you been involved in the Interprofessional Education programme at UWC in the Theewaterskloof Municipality?

1. □Yes 2. □ No

If Yes please specify community: ……

Placement Experiences

18. During your Interprofessional rural placement experience were you able to appropriately develop skills for further training?

Disagree strongly Disagree moderately Disagree slightly Agree slightly Agree moderately Agree strongly

	1	2	3	4	5	6
1. Develop my knowledge base	□	□	□	□	□	□
2. Develop my procedural skills	□	□	□	□	□	□
3. Develop my health care practice presentation skills	□	□	□	□	□	□
4. Develop my written case/community health histories						

19. Overall

Disagree strongly Disagree moderately Disagree slightly Agree slightly Agree moderately Agree strongly

	1	2	3	4	5	6
1. The environment was conducive to learning	□	□	□	□	□	□
2. The educational experience met my expectations	□	□	□	□	□	□
3. I had a deeper understanding of the resources and networks required to assist people with health related problems in the rural community	□	□	□	□	□	□
4. I was well prepared for examinations	□	□	□	□	□	□
5. I was able to negotiate my learning goals	□	□	□	□	□	□
6. I was able to work together in a team to assess and address community health needs	□	□	□	□	□	□

7. I had access to supervision to assist my learning □ □ □ □ □ □

8. I had access to adequate Information Technology (computers, internet, etc) to assist my learning □ □ □ □ □ □

9. I had a greater understanding of my profession in a health care team approach to rural health issues □ □ □ □ □ □

10. Learning with other disciplines helps in becoming a more effective member of a health care team □ □ □ □ □ □

11. It enhances professional practice and relationships □ □ □ □ □ □

12. A better understanding of other health professions roles and responsibilities □ □ □ □ □ □

19.1 Do you have any other comments on the Interprofessional rural placement experience?

_____

_____

_____

_____

_____

Supervision Experiences

20. Your supervisors generally

Disagree strongly Disagree moderately Disagree slightly Agree slightly Agree moderately Agree strongly

1 2 3 4 5 6

1. Give adequate help and advice □ □ □ □ □ □

2. Were approachable □ □ □ □ □ □

3. Were enthusiastic □ □ □ □ □ □

4. Assisted me in identifying my learning needs □ □ □ □ □ □

5. Treated me with respect □ □ □ □ □ □

6. Facilitated a learning environment □ □ □ □ □ □

7. Gave me sufficient autonomy □ □ □ □ □ □

8. Gave useful feedback □ □ □ □ □ □

9. Were excellent role models □ □ □ □ □ □

10. Provided me with access to people with a wide range of health problems □

□ □ □ □ □

11. Provided me with appropriate project/clinical responsibilities □ □

□ □ □ □

12. Provided opportunities for continuity of patient care □ □ □ □

□ □

13. Facilitated the development of my decision making about interprofessional practice in health care □ □ □ □ □ □

14. Provided appropriate supervision of project decisions □ □ □

□ □ □

15. Overall my rural placement provided an excellent service-learning experience

□ □ □ □ □ □

21. Do you have any other comments on Supervision?

_____

_____

_____

_____

Overall questions

22. The best things about the rural placement experience are /were……

_____

_____

_____

_____

23. The best things about the interprofessional experience are/were……..

_____

_____

_____

_____

24. What suggestions or recommendations do you have that would improve the IPE experience in the future?

_____

_____

_____

_____

25. In your own opinion, what would improve the rural placement experience in the future?

_____

_____

_____

_____

26. Was there anyone who became a role model for you and contributed positively to your IPE and rural placement experience?

1. □ Yes 2. □ No

If yes, was it some in the rural based community or at the university?

_____

_____

_____

_____

What was important about that experience?

_____

_____

_____

_____

27. If you intend to sub-specialise are you concerned about the availability of rural-based practice opportunities in your intended training area?

1. □ Yes **2. □ No**

Comment:

_____

_____

_____

_____

28. Compared with your peers' experiences of rural placement, your experience is/will be/ was…..?

_____

_____

_____

_____

29. What things would encourage you to consider practice in rural/disadvantaged communities?

_____

_____

_____

_____

30. What would encourage you to choose a rural setting for some/most of your post health science training?

_____

_____

_____

_____

31. Do you have other comments or concerns?

_____

_____

_____

_____

Other rural or disadvantaged community experience

32. Outside this IPE and rural experience, what rural clinical/medical experience have you had?

_____

_____

_____

_____

33. How much total time have you spent (other than this) in rural/disadvantaged communities compulsory and elective training experiences?

Number of weeks:

Interest in further rural education and intent regarding rural practice

34. Please answer the following if you were involved in the rural placement

Disagree strongly Disagree moderately Disagree slightly Agree slightly Agree moderately Agree strongly

1 2 3 4 5 6

1. Given my time over I would be involved in the rural placement again □ □ □ □ □ □

2. I would spend more time at the rural placement site if I could □ □ □ □ □ □

3. My rural placement experience increased my interest in rural training and rural practice □ □ □ □ □ □

4. I would prefer rural internship/basic training after my clinical school experience □ □ □ □ □ □

5. I would consider rural practice after completion of health science education □ □ □ □ □ □

35. Please help us with any further comments or concerns about your Interprofessional rural placement experience:

_____

_____

_____

_____

_____

36. When considering rural practice, I believe that

Disagree strongly Disagree moderately Disagree slightly Agree slightly Agree moderately Agree strongly

1 2 3 4 5 6

1. Working in a rural area provides more opportunity to practice a variety of skills

□ □ □ □ □ □

2. There are good opportunities for employment in rural areas □ □ □

□ □ □

3. There are good opportunities for career advancement in rural areas □ □

□ □ □ □

4. Staff are more supportive of each other in rural areas □ □ □ □

□ □

5. Professional isolation is a problem when working in rural areas □ □

□ □ □ □

6. Rural practice provides greater opportunity for clinical practice autonomy □

□ □ □ □ □

7. There are things I enjoy doing in rural areas □ □ □ □ □

□

8. Rural areas have good social opportunities □ □ □ □ □

□