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EXPLORING UNDERGRADUATE NURSING STUDENTS' PERCEPTIONS ON BEING CHANGE AGENTS IN A COMMUNITY-BASED TRANSFORMATIVE LEARNING PROGRAMME AT A NURSING EDUCATION INSTITUTION IN KWAZULU-NATAL

BY

VIOLET IRIS MNCINA

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A dissertation submitted to the School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal in partial fulfilment of the requirements for the Degree of Masters of Nursing Education (Coursework)

By
Violet Iris Mncina

Student number: 216075265

Research Supervisor: Professor N.G. Mtshali

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DECLARATION

I, Violet Iris Mncina, declare that this dissertation titled, '**Exploring undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in Kwa-Zulu Natal'** is my original work. It has never been submitted before for any other purpose or at any other University. I also declare that the sources of information used in this work have been acknowledged by means of reference.

This research project has been read and approved for submission by supervisor, Professor Ntombifikile Gloria Mtshali.

Mrs Violet Mncina   Date: 1.03.2018

(**Student number: 216075265**)

Professor Nombifikile Gloria Mtshali   Date: 1.3.2018

(**Research Supervisor)**

DEDICATION

I dedicate this work to my parents, Mr and Mrs Mwase, for the education they have given me and their encouraging words, "Put your trust in God and He will give you the desires of your heart. *'Ndawonga Apapi'*.

My spouse, Mr D.G. Mncina, my beautiful daughters, Wenzile and Buhle, you are my inspiration, the support you gave me is immeasurable.

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ABSTRACT

Background

The World Health Organization advocates for the strengthening of the healthcare system to improve the quality and efficiency of health service delivery. Transformative learning is associated with producing graduates who are change agents and in possession of leadership abilities to influence change in the healthcare system. The undergraduate nursing education programme of interest in this study adopts a community-based and problem-based curriculum, which uses a competency-oriented approach since 1994.Developing students as change agent's is one of the competencies in the undergraduate nursing education.

Purpose of the Study

The purpose of this study is to explore undergraduate nursing students' perceptions of being change agent in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal.

Methods

An exploratory qualitative approach is adopted in this study. The research setting is a nursing department in a selected university in KwaZulu-Natal. The sample includes 2nd, 3rd and 4th year nursing students registered in a Bachelor of Nursing programme. The participants were purposively selected because of their exposure to competency-oriented, community and problem learning. A total of 15 participated in focus group interviews. Ethical clearance was obtained from the University of KwaZulu-Natal Ethics Board: Protocol number is HSS/1910/016M, and ethical

principles are observed throughout the study. Issues of quality are addressed through observing the four elements of trustworthiness; credibility, dependability, transferability and conformability.

Results/Findings from the Study

The findings of the study reveal that students understand the concept 'change agents' as people who possess the following characteristics: problem solvers, action-oriented researchers, health advocates, as well as advocacy and an empowering role. This is shown as a result of exposing them to a community-based learning setting for experiential learning while providing service to under-resourced communities.

The findings further reveal that the development of students as change agents follows a process comprising of a progressive curriculum, shifting from traditional to an innovative curriculum. The educational environment in schools embraces democracy with social accountability values abetted in the development of students as change agents. The conditions that prepare students to be developed as change agents are related to students, facilitators, institutions and community. The consequence of developing students as change agent's results in producing empowered students, raises awareness on student's health issues, develops self-reliant communities and further reveals widening access to disadvantaged communities as well as having benefits to the faculty.

Recommendations

It is recommended that students should be made aware early in the programme on competencies as they are expected to be change agents at the end of the programme and how the learning experiences in the programme are used to shape these competencies. There should be a structured

way of monitoring the development of the required competencies as early as from first year so as to provide the necessary support timeously.

The use of innovative teaching strategies will assist students to develop critical thinking skills, communication and creative skills, thus becoming change agents. Educators should introduce learners to the theory of transformative learning and should provide necessary tools for students to be able to develop critical analytical reflection in the changing world so as to become better change agents. The use of transformative learning Programmes including community based education could be used to shape the nursing education Policies that will enhance the development of students as change agents.

Further research can enlightened policy makers to use transformative learning in order to prepare students as change agents thus improving the quality on patients outcomes.

Further research is recommended with diverse participants comprise academics, community members and other stakeholders involved in developing students as change agents, with as this study presents only the views of the students as it was for a mini thesis

Key words: Agents of change, Change Agents, Transformative learning, Community-based education

LIST OF ABBREVATIONS/ACRONYMS

AIDS: Acquired Immune Deficiency Syndrome

CBE: Community-Based Education

DOE: Department of Education

DOH: Department of Health

GHWA: Global Workforce Alliance

HIV: Human Immune Virus

HPCSA: Health Professionals Council of South Africa Medical and Dental Professions

ICN: International Council of Nurses

NCHE: National Commission of Higher Education

NGO: Non-Governmental Organization

NQF: National Qualifications Framework

NMC: Nursing Midwifery Council

OBE: Outcomes-Based Education

PHC: Primary Health Care

RIDE: Regional Initiatives in Dental Education

PBL: Problem-Based Learning

SA: South Africa

SANC: South Africa Nursing Council

UNICEF: United Nations Children's Fund

WHO: World Health Organization

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CHAPTER ONE

1.1 INTRODUCTION AND BACKGROUND

"Education does not transform the world. Education changes people. People change the world (Paulo Freire)"

The 1910 Flexner report states that the past 100 centuries have been marked with achievements on health professional education reforms towards contribution on health and development (Frenk, Chen, Bhutta, Cohen, Crisp, Evans *et al.* 2010). The World Health Organization (WHO, 2011) places emphasis on strengthening the healthcare system to improve the quality and efficiency of health service delivery. In line with this emphasis, healthcare systems globally are working towards health for all, or universal health coverage, striving to ensure that all people have access to quality health care, irrespective of their status and geographic location.

The 21st century is marked by various social ills that have led to an influence on the scarcity of skill and deficiency of professional competencies (G20 Training Strategy, 2011). The health personnel education is blamed for failing to address these challenges that have been attributed to a content-orientated curriculum, lack of appropriate measures to prepare students for deployment and retention where they are most needed. Transformation of health professional's education has been identified as the strategy that can be used to develop graduates' competencies, who can then respond to the needs of the population in the society (WHO, 2013). To achieve this a global alignment is needed on the social movement of all stakeholders, educators, students and young health workers, professional bodies, universities, Non-Governmental Organisations (NGOs) international agencies, and donors to act in view of the implementation of these new approaches.

The Lancet report suggests to those that equip graduates with relevant competencies including leadership should consider changing teaching strategies that will be in line in preparing students to be change agents. Training for relevance requires education and training programmes which will expose students to community-based experiential learning activities that will require them to address the health needs of local communities during the learning process (Irlam, Pienaar and Reid, 2016). Community-based education, competency based education and service-learning programmes are examples of programmes that embrace transformation learning (Frenk *et al*., 2010). Thus, this study explores undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal.

The WHO (2011) places emphasis on strengthening the healthcare system to improve the quality and efficiency of health service delivery. In line with this emphasis healthcare systems globally are working towards health for all or universal health coverage, striving to ensure that all people have access to quality health care, irrespective of their status and geographic location. Armstrong and Rispel (2015) highlight a need to transform the preparation of the health workforce in order to achieve universal health coverage. The WHO (2013, 2011, 1987) recommend strengthening of health professional education by integrating innovative teaching approaches that will equip graduates with competencies to provide care at all levels of healthcare settings and enable them to respond to the diverse health needs of the population. Irlam *et al*.(2016) therefore, propose that education and training institutions should provide more than just knowledge and skills required to be a health professional, but also produce graduates who are relevant and responsive to the local and global health needs and challenges.

As much as training of health professions has been conducted throughout the world, it is essential that programmes implemented be assessed to see if they produce necessary skills and competencies as laid down by the (WHO,1987). The Lancet report Frenk *et al*.(2010) recommends transformation of the education of health professionals to ensure that the graduates produced have the relevant skills and are able to address the population's needs. Transformative learning has been recently implemented in the United States and Canada through the launch of The Carnegie Foundation for Advancement of Teaching National Nursing Education Study on Educating Nurses: A Call for Radical Transformation which focuses on curriculum and pedagogical changes. (Benner, Sutphen, Leonard and Day, 2010).

Training for relevance requires education and training programmes which will expose students to community-based transformative learning activities that will require them to address the health needs of local communities during the learning process (Irlam *et al*., 2016). More importantly, the education of health professionals should expose the students to learning experiences that will equip them with ethical and practical skills that will facilitate their development as change agents to achieve health for all (Pinto and Upshur, 2013). Frenk *et al.* (2010) recommend adoption of transformative learning as it is viewed as one of the drivers to transforming the preparation of the health workforce, achieving equity in health and universal health coverage (Frenk *et al*., 2010).

Transformative learning in health professionals' education is gaining momentum (Naccarella, Butterworth and Moore, 2016) and students learn values and leadership skills to act as change agents (Van Heerden, 2013). Transformative learning is perceived to develop leadership capacities and eventually produce change agents (Essa and Hoffman, 2014). The students in transformative learning programmes are managed as agents of change with a potential to rethink problems and change practices of individuals, groups and organizations (McAllister, 2015). Transformative

learning also encourages reflexive self-critique, empowering graduates to develop to their maximum potential as change agents. (Mosqueda-Díaz, Vílchez-Barboza, Valenzuela-Suazo and Sanhueza-Alvarado, 2014).

Community-based transformative learning education, competency based education and service-learning programmes are examples of programmes that embrace transformation learning (Frenk *et al*., 2010). The programmes of this nature raise the consciousness of the students to the social aspects of health care and social issues impacting on the health of clients (Mc Menamin, Mc Grath, Cantillon and Mac Farlane, 2014), and during the learning process the students learn how to influence change in the health of individuals, groups and communities. The focus is on community-based transformative learning as community-based experiential learning sites are used to develop students as change agents.

In South Africa service learning was adopted by a number of higher education institutions post 1994 in line with the recommendations from the White Paper on 'A programme for higher education transformation' by the Department of Education (DoE, 1997). The programme offered in higher education institutions introduced service-learning modules, with students learning through providing service during community engagement and community service learning experiences. Institutions of higher learning affected the development of partnerships between communities and other service sectors through service learning, with students serving as agents of change to improve the quality of life in local communities (Mtshali, 2009). This implies that transformative learning, where students are developed as change agents is not only reported in health professional education but also in mainstream higher education programmes.

The paradigm shift to the adoption of transformative learning in health professionals' education is as a result of the limitations associated with hospital-based education programmes which are utilizing informative and formative learning strategies that dominated before the 21st century (Frenk *et al*., 2010). Informative learning is about obtaining knowledge and skills with a view to producing technical experts, and formative learning is about socializing students around values of the profession, ethical norms and professional behaviour, with the aim of producing professionals. Frenk *et al*.(2010) organize these forms of learning at different levels; with informative learning at level one, formative learning at level two and transformative learning at level three of the pyramid.

The limitations of the 20th century education programmes are associated with the realization that training institutions mainly focus on the first two levels of learning: informative and formative, not transformative learning (Van Heerden, 2013; Frenk *et al*., 2010), with hospital-based education and curative focus dominating. The limitation of hospital-based education is that it does not provide students with opportunities to learn how to address the health issues which are as a result of social, economic, cultural and political forces (Uys and Gwele, 2005). The conservative method of training students in a hospital-based environment is certainly not able to produce graduates who are responsive to the needs of the community (Mtshali and Gwele, 2015). Health professionals in hospital-based education do not have enough opportunity to learn how to address the social, economic, cultural and political forces affecting health due to the short duration in preparation for the broader aspects of health (Uys and Gwele, 2005).

A paradigm shift is therefore required to change the way in which students are prepared (Ndateba, Mtshali and Mthembu, 2015) . The education programmes should prepare the students as agents of change, prepare them to take a lead in affecting or influencing change in surrounding

communities and healthcare settings where they are placed (Mtshali and Gwele, 2015). Irlam *et al.*(2016) propose learning and practicing in experiential learning settings that provide authentic community exposure to develop the students' capacity to bring about change in the society, while developing their skills as change agents. Community-based programmes are one example where students engage in experiential learning activities that require them to provide health interventions that will strengthen the capacity of clients in communities for self-determination later (Mtshali and Gwele, 2015). Through addressing local community problems, the students are introduced into the culture of social accountability. Engaging students in learning experiences that promote social accountability develops them as change agents (Van Heerden, 2013; Frenk *et al*., 2010).Mooney and Nolan (2006) assert that students in programmes where they are expected to serve as agents of change, learn to challenge problems encountered by the communities and discover solutions through critical enquiry. Freire (2000) further states that such learning experiences allow the students to reflect and act on their actions thereby bringing change to the society through liberation.

Mezirow and Taylor (2011) have developed a theory on transformative learning. Mezirow (2009; 2011) describes transformative learning as "learning that transforms problematic frames of reference to make them more inclusive, discriminating, and reflective, open and emotionally able", however there are challenges that have been identified on the implementation of the transformative learning, which could have a negative impact on the development of students as agents of change. Mezirow and Taylor (2011) state that learners, when they are exposed to new information, don't want to move away from their comfort zone which challenges them towards critical reflection, and educators should not push learners too far as this can lead to students becoming defensive and resisting new learning. Educators need to maintain a balance between challenge and comfort in their interaction with students. Mezirow, further identifies the power dynamics in the classroom

which exposes teachers as having authority thereby students portray the same role in the field of work. Culture where learning takes place, including race, class and gender, could be seen as a barrier where students' identity is restricted in performing activities. Transformative learning deals with emotional reactions, while learners engage in professional and personal dialogue they might find it difficult to make choices as they interpret events (Mezirow and Taylor, 2011).

In South Africa the Minister of Health held a nursing Summit (SANC, Strategic Planning 2011) called for a nursing reform in planning and development of the nursing workforce through the nursing strategy which will aid in addressing the competencies of the nurses. One of the competencies expected from these graduates is that they should be able to work as advocates and change agents for improvement or provision of needed health services and resources, especially in under-resourced and remote healthcare settings (WHO, 2014). Van Heerden (2013) Proposes transformative learning to produce graduates who are empowered with competencies of open-minded change agents who will help ensure that the population's health needs are met, that inequities are minimized, and that health system deficiencies are addressed in co-operation with the relevant stakeholders (Van Heerden, 2013). According to Van Heerden (2013) these graduates influence change in individuals, organizations and the healthcare system.

The incorporation of transformative learning principles and practices in the curriculum is believed to strengthen the training of health professionals who are able to function effectively within health care and who will serve as agents of change for social good in the healthcare settings where they are based. Van Heerden (2013) adds that the graduates produced are equipped with the core competencies required to adequately address the health needs of SA's people, not only in the urban areas but in the deep rural areas as well.

Since the publication of the Lancet report by Frenk *et al*.(2010), globally and in South Africa, the regulatory bodies are advocating for transformative learning and have developed core competencies to guide the process of curriculum development, and one of the core competencies is that of developing students as change agents, with leadership attributes. The Minister of Health in South Africa has made a call to transform the training of health professionals to ensure that graduates produced are competent to respond to the need of the dynamic healthcare system in South Africa, which has a strong focus on primary health care.

The delivering of educational programmes will prepare graduates to be equipped to work in community settings and to bring about change in the nursing education system in South Africa. These could be achieved through introducing innovative approaches such as service learning, problem-based education and community-based education which has been found to be responsive to the demands of the society (Kruger, Nel and Van Zyl, 2015).

In 2012 the Health Professionals Council of South Africa, Medical and Dental Professions Board, Undergraduate Education and Training subcommittee developed a core competency model framework and proposed transformation of undergraduate programmes to facilitate the development of students as change agents. The South African Nursing Council (SANC, 1999) has also developed a competency framework that has promoting health as one of the key areas across all nursing programmes. In the process of learning to promote health, nurses are equipped with the skills of becoming change agents. Transformation of the Nursing Education System in South Africa was to restructure the higher education system which will:

> …produce graduates with skills and competencies that will build the foundations for
> lifelong learning, including, critical, analytical, and problem-solving and communication

skills, as well as the ability to deal with change and diversity, in particular, the tolerance of different views and ideas (White paper, 1997).

A need was identified by the Global Workforce Alliance (GHWA, 2008) to develop policies which will retain graduates who will use their knowledge and skill productively, focusing on addressing working conditions that will create a positive working environment. A growing body of knowledge in nursing education emphasize that new philosophies view the student as active rather than passive in the learning process, which calls for a change in the designing of the curriculum in educational institutions (Mekwa, 2014). In addition, there is a high demand for producing nurses who will keep pace with the changes in the healthcare system to ensure high quality and safe patient-centred care in the 21st century, therefore students as change agents, having the necessary skills, will rise above expectations to meet these demands.

The transformation in the preparation of health professionals is more important in nursing and midwifery education and training, as most of the healthcare systems are nurse-led and nurses are found at all levels of care in the healthcare system. (Kruger *et al*., 2015) is of the view that producing nurses who will be responsive to the needs of the society, requires students to be knowledgeable about the functioning of the healthcare system, and possess relevant competencies to address the needs of the healthcare system. Students on completion assume the role of a professional nurse which is characterized by leadership responsibilities and an expectation of influencing change as a role model and change agent (Maragh, 2011).

1.2. Problem Statement

The Health Personnel Education is blamed for failing to address the challenges that have been attributed to the content-oriented curriculum, lack of appropriate measures to prepare students for

deployment and retention where they are most needed (WHO, 2013). Transformation of health professionals' education has been identified as the strategy that can be used to develop graduates' competencies who can respond to the needs of the population in society (WHO, 2013; Frenk *et al.*, 2010). This has contributed to the noted paradigm shift towards transformative learning, competency-based and community-based education programmes, with an emphasis on equipping students with competencies to serve as agents of change with leadership skills to influence change in individuals, groups and organizations. The regulatory bodies such as the HPCSA and the Nursing Council in South Africa (SANC, 2014) developed competency-frameworks to guide the review or development of new training programmes.

However, several challenges in the education of health professionals have been identified (WHO, 2014; Frenk *et al.*, 2010). Teaching health professionals has not kept pace with the challenges of the dynamic healthcare system which is characterized by universal health coverage, the complex nature of patients and rapid advances in technology. Curricula are fragmented and compartmentalized and subjects based, they are outdated and static, and the competencies of graduates are not in line with populations' and healthcare systems' needs, and they do not adequately take into consideration the contextual determinants of health, as they are hospital-oriented with limited focus on primary health care (WHO, 2014; Frenk *et al.*, 2010). Furthermore, there is little socialization of students into the culture of social accountability; the social obligation to direct education, research and service activities towards addressing the priority health concerns of the community, region, or nation they have a mandate to serve (WHO, 1995).

Specifically, towards nursing and midwifery, the World Health Organization (2014) points out a number of weaknesses in nursing and midwifery education in the African Region which are associated with formative and informative learning. These include a weak linkage between nursing

education programmes and priority health issues, a lack of clearly defined competencies, production of graduates with limited competencies to respond to the health needs of the population and contribute to improving health outcomes, as well as poor integration of theory into practice. To address these challenges WHO produced prototype competency-based nursing and midwifery curricula that will facilitate the production of nurses and midwives equipped to address health, and health system challenges in their countries.

These include weak linkage between nursing education programmes and priority health issues, lack of clearly defined competencies, production of graduates with limited competencies to respond to the health needs of the population and contribute to improving health outcomes, as well as poor integration of theory into practice (WHO, 2014).

In view of the challenges, there is a need to adopt community-based transformative learning, enabling graduates to be competent and responsive to the needs of the population they serve and the healthcare system. With nursing having a strong background in a hospital-based content-driven programme, the adoption of transformative learning with an intention of producing change agents requires change in the mind-set of both the educators and the students. The selected university-based nursing department is reported to have adopted a community-based approach since 1994 with the aim of ensuring that graduates produced are competent to address the needs of the population and healthcare systems that are based on a primary health care approach (Mtshali, 2015, 2009, 2005; Ndateba, *et al*.,2015).

Ndateba *et al*.(2015) ; Mtshali and Gwele (2015) ; Mtshali (2009, 2005) ; Uys and Gwele (2005) on their studies revealed that community-based programmes indicate that the students have the role of change agents in communities, but studies conducted internationally reflect some

challenges with the implementation of the transformative learning with a specific focus of developing students as change agents. Literature search in South Africa shows very limited studies Irlam *et al*. (2016) agree with Essa and Hoffman (2014). Thus, this study aims to explore undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal.

1.3. Purpose of the study

The purpose of this study is to explore undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal.

1.4. Research Objectives

(a)   Describe nursing students' understanding of the concept 'change agent in the community-based transformative programme'.

(b)   Describe the learning process that facilitates students to develop as change agents in a community-based transformative programme.

(c)   Describe the conditions that facilitate or serve as barriers to developing students as change agents in a community-based transformative programme.

1.5. Research Questions

(a) How do   nursing students understand the concept 'change agent in the community-based transformative programme'?

(b) How are student nurses developed as change agents in a community-based transformative programme?

(c) What conditions facilitate the development of students as change agents?

(d) What conditions serve as barriers to developing students as change agents in a community-based transformative programme?

1.6. Significance of the study

1.6.1. Nursing Practice

The changing healthcare system that is underpinned by a Primary Health Care (PHC) philosophy requires a change in the nature of the graduates produced. The findings, if disseminated to relevant forums, may strengthen the need to support programmes with a strong health promotion and illness prevention focus for the greater good of the consumers of the health services. With the drive to improve the population's health outcomes through universal health coverage, the findings from this study may illuminate the value of graduates produced from a programme with a strong community focus, aimed at developing students as change agents and leaders. The findings from this study may also contribute to shaping nursing education policies that will advocate for developing students as change agents and leaders. The findings from this study could also enlighten policy makers on innovative teaching strategies that will better prepare nurses to improve on patient outcomes.

1.6.2. Nursing Education

The World Health Organization (2013), as well as Frenk, *et al.* (2016) recommend a paradigm shift to transformative education or learning and the implementation of education programmes that

will develop students as change agents. The findings from this study may help nurse educators to better understand how nursing education programmes that are transformative in nature may be implemented to develop students as change agents who are equipped to address the needs of the society. The findings may contribute to the review of the undergraduate nursing programme, with specific focus on how learning activities may be structured for them to be more effective in achieving the desired outcomes. It may also help nurse educators in identifying barriers among undergraduate nursing students in using community-based programmes in higher education and how these may be addressed to enhance implementation of such programmes. The findings of the study may contribute to the process of evaluation of the nursing curriculum, if it is relevant in producing graduates with competencies that will compete with the challenges of the 21st century.

1.6.3. Community

Authors such as Linda, Mtshali, and Engelbrecht (2013), Mtshali and Gwele (2016), as well as the WHO (1987) outline the role to be played by communities in a community-based education programme for a desired outcome. The findings may assist nursing education institutions in guiding communities in the role they may play in the process of developing students as change agents. The findings may influence collaboration with communities in facilitating the learning of the students. Through collaborative partnership, a learning environment that fosters caring and good working relationships between the students and the community, is created.

1.6.4. Research

This study is of limited scope, as it is a mini study. The perspectives are from the students only. The finding may therefore serve as a baseline to further research in this area, which may include a wider range of participants to explore the process of developing student nurses as change agents.

1.7. Operational Definitions

Change agent: In this study a change agent is a student nurse in an undergraduate programme who works with clients, who may be individuals, families, groups or communities to bring about the desired change in their health status or other issues impacting on their health status. The students may achieve this through facilitating the process of change, educating, empowering with skills or advising and counselling as per the desired support.

Community: Is a non-traditional clinical learning setting, outside the hospital environment used to place undergraduate students in an experiential learning setting. These non-traditional clinical learning sites include diverse types of communities; urban, semi-urban and informal settlements where undergraduate nursing students can learn through delivering health related service to individuals, groups and communities as part of their role as agents of change.

Community-based undergraduate nursing education programme: This programme focuses on clinical education from healthcare institutions to community settings, particularly on the needs of the student to gain competences which will be necessary for future professional practice, more especially in the community environment.

Perceptions: This means the way in which undergraduate students express themselves in understanding and experiencing community-based education while performing service and learning, and their views on the implementation of the programme.

Transformative learning education: This means that students doing community-based learning education will become aware of the social problems affecting the communities, thus empowering

them by raising their consciousness and learning to form their own interpretations, and they will thereby become more aware of their new ways of doing things.

University-based nursing department: This is a specialized area located within an organization which offers undergraduate nursing programmes on community-based experiential learning to 2nd, 3rd and 4th year undergraduate students.

University-based Nursing Education Institution: These are founded organizations consisting of a complex of buildings and its associate resources for the specific purpose of providing undergraduate education.

1.8. Conceptual Framework

The study does not have a conceptual framework, because it adopts a qualitative approach. According to Grove, Burns and Gray (2013) in most qualitative studies, researchers do not identify specific theoretical frameworks during the design of their studies. The rationale behind this is that the context of a theory may pose challenges on the side of the researchers, and the results and findings should take into consideration the perspectives and views of the participants (Grove *et al*., 2013). Thus, in this study the conceptual framework is not necessary, because the themes or concepts have to emerge from the collected data and not be forced into an existing framework.

1.9. Conclusion

This section covered the introduction and the background to the study, the problem statement, the research objectives, research questions, significance of the study and the operational definition. The next section will cover an outline of the literature review.

1.10. Dissertation Outline

Chapter One: This chapter presents the overview of the study. The background is presented followed by the problem statement, purpose, research objectives, research questions, the significance, conceptual framework and operational definition of concepts. The dissertation outline is also illustrated.

Chapter Two: This chapter presents reviewed literature, which is significant to the perceptions of students as change agents in the community-based transformative programme which is presented in the following topics. Characteristics of a change agent, the role of a learner as a change agent, benefits of community-based education, barriers to community-based education, the learning process, as well as Paulo Freire's education on democracy and Paulo Freire's influence on the teaching and learning process will be discussed.

Chapter Three: Presents the research methodology. A constructivism paradigm and qualitative research design is used in this study, and an outline of how data was collected and analysed is presented.

Chapter Four: Presents the analysis of research findings which was adapted from the Tesch data analysis process.

Chapter Five: Presents the interpretation and discussion of research findings, and recommendations based on the results of the study are described.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter two presents the literature review related to the change agent as a phenomenon and community-based transformative learning programmes as an approach in which students perceive themselves as change agents. The review covers the concepts change agents, philosophies on change agents, the process of developing students as change agents, and conditions that facilitate or hinder the development of students as change agents. Information was obtained from the website, 'Google', books from the library and various databases from electronic resources, such as Education Full Text, CINAHL, Health Source-Consumer Edition, Health source: Nursing/Academic Edition, MEDLINE, and PubMed. Books were also used as secondary sources. The key words that were used are: Change agents, agents of change, community-based education. The concept change agent and philosophical views presented in the literature review had been found by the researcher to be relevant in the study.

2.2 Conceptualization of the Concept Change Agents and Students as Change Agents.

The concepts 'change agents' or 'agents of change' as used interchangeably is a term that has been used in the last century as described by (Lippitt, Watson and Wesley, 1958) stating that change agents are people who provide support in an organization; they are sometimes chosen persons, or a group of people. Additionally, a change agent is defined as a person who acts on behalf of another, or a person or a thing that takes an active role or produces a specified effect (Webster, 2011). Change agents are perceived as always having a vision on what or how, and uses that as a thought leading to take an action (Senaji and Galperin, 2017). Change agents are viewed as people who wants to bring change in the society and are regarded as researchers, consultants, counsellors,

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and teachers. (McHugh, Reedy and Yehle, 2017). Change agents are viewed as passionate people who provide assistance to the community in identifying the needs of the community, thus proposing solutions with the support of the community members (Amalba, van Mook, Mogre and Scherpbier, 2016). Various studies (Nandan, London and Bent-Goodley, 2015; Ferguson, 2013) state that social workers as problem solvers are seen as caring people , always available, in order to bring improvement to the lives of the disadvantaged people. Change agents as problem solvers engage communities to work together, thus affording students the opportunity to practice skills needed to participate in finding solutions to the problems facing communities. According to Clark, (2015) change agents are viewed as solution givers who understand the real problems of individuals, families and communities taking into consideration how the solutions relate to people's needs and anxieties.

Godin and Vinck (2017) refer to change agents as innovators whom are further referred to as expert as they are better positioned to drive the change process. Change agents are inspirational as they advise and sell ideas to others so as to give solutions to their problems According to Okello, Nankumbi, Ruzaaza, Bakengesa, Gumikiriza, Arubaku *et al*. (2015) change agents are viewed as people having the knowledge and skills to develop projects that will bring a difference to people's lives. Mullen and Otto (2017) note that librarians as innovators working as change agents could hastened the process of transformation while collaborating with scholarly programmes. According to Crisp and Chen (2014) innovative teaching strategies that enhance problem solving include problem-based learning and service learning, which could be used by change agents to deal with problems effectively. It is believed that these strategies enhance students' ability to develop

creativity thus enabling them to reason on how to come up with a solution (Chan, 2013; Tan, Chye and Teo, 2009).

Change agents are also regarded as strategists. According to Webster (2011) a strategist is a person who is skilled in making plans to achieve a goal. Change agents as problem solvers apply their creativity while implementing strategies to solve community problems. Diab and Flack (2013) add that change agents encourage a dialogue and partner with communities through knowledge sharing to get to the root cause of the problem. Arieti (2011) notes that these strategies assist change agents to better understand the community lifestyle. While Onyango-Ouma, Aagaard-Hansen and Jensen, (2005) agree that change agents as strategists are capable of manoeuvring situations in order to come up with solutions. A study conducted by Richardson (2006) confirmed that students as change agents participated in a problem solving programme, and 90 per cent of the students reported that the programme provided service learning and promoted solutions in solving problems of the communities. Karatas and Baki (2013) in their opinion, think that teachers and Principals as problem solvers are capable of attaining good results in solving problems they have identified themselves. Boud and Molloy (2013) agree with the above authors' mentioning benefits of students' involvement during the teaching and learning process, citing interest as a core to learning. Dunne, Zandstra, Brown and Nurser (2011) ; Fielding (2001) state that change agents are regarded as action researchers who work as individuals or a group of people to improve issues affecting communities, with an aim of solving their problems. Chevalier and Buckles (2013) propose that action researchers are to participate in research where the action is done with people for the purpose of education, this will benefit students to become change agents. Several studies Dunne *et al*., (2011); Tovar, (2015) reveal that action researchers engage themselves with community members,

NGOs, academics, stakeholders and service providers, collect data through community-based initiatives to address disparities on health status' associated with social inequalities in the community. Okello *et al.*, (2015) reports that action researchers as change agents use scientific knowledge to collect data on individuals, families and the community by doing assessments, planning, implementing and coming up with a diagnosis and planned interventions according to the problems identified**.** This is further achieved by conducting surveys in the community (Arieti, 2011).According to Grove *et al.* (2013)" a survey is described as a method used to collect data by means of e-mail, mail, or by doing face-to-face interviews". Okello *et al*. (2015) ; Wallerstein and Duran (2010) bring to light that change agents conduct surveys in order to, identify problems encountered in the community, prioritize, validate, and intervene, and to evaluate for the purpose of bridging knowledge to science." According to Hesselbarth and Schaltegger (2014) change agents are able to plan projects which can be used to solve existing and future problems.

 In a study conducted in Ireland, it is suggested that students as agents of change challenge problems encountered by communities and discover solutions through critical enquiry. Fielding (2001) supports the view that students as researchers become involved in issues they identified as important with the help of the facilitators, they collect data and make recommendations based on their findings. Kay, Dunne and Hutchinson (2010) and Dunne *et al.* (2011) further add that through research, change agents as researchers explore and confirm what they have discovered, generate new knowledge which is shared with colleagues, facilitators as well as the institution to affect change in the educational process.

Change agents form collaborations between communities while addressing problems of the communities. Ndateba *et al*. (2015); Uys and Gwele (2005); WHO (1987) and Mooney and Nolan (2006) reveal that in a community-oriented curriculum problems are drawn from the community, and partnerships are formed in order to learn and understand the real problems facing communities, thus coming up with solutions. Healey (2012) gives a report on students who conducted research in the University of Worcester and presented positive outcomes on the research they had conducted in the educational environment. In the same view Weeks, Convey, Dickson-Gomez, Li, Radda, Martinez *et al*. (2009) conducted a study on peer health advocates as multilevel community change agents who implemented a continuous programme identifying the effects of drug users on the development of interventions on HIV and AIDS. Through the process of conscientization to individuals and the community, a paradigm shift results in the reorientation of the social roles of the individuals, allowing them to come up with solutions to their problems which require them to build the community in a positive way (Freire, 1970).

The advocacy role of nurses advocating for patients has been explored by various authors (Kalaitzidis and Jewell, 2015; Choi, Cheung and Pang, 2014). An " advocate is defined as one that pleads for, protects or supports a cause or interest of others "(Dictionary, 2006). Change agents are viewed as people who bring awareness to problems affecting communities, advocating for the vulnerable people (Espina, Bekemeier and Storey-Kuyl, 2016). Change agents are viewed as people who can talk on behalf of those who cannot talk for themselves, fighting for their rights without looking at the differences International Council of Nurses (ICN, 2014). Peroni and Timmer (2013) state that the elderly, mentally ill, and children are the groups of people who are disadvantaged as they cannot take care of themselves. However, Mechanic and Tanner, (2007)

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note that vulnerable groups of people also include people with chronic conditions. At the heart of advocating for the disadvantage people, change agents are tasked to bring awareness to the people by utilizing services that are available in the communities. Freire (1973) is of the opinion that bringing awareness to the people with social, economic and political ills will emancipate them from slavery. Katikiro and Njau (2012) conducted a study and mention that outreach programmes have been used as a tool to sensitize communities to available health services. Farsi, Dehaghan - Nayeri,Negarandeh and Broomand, (2010) argue that nurses might encounter risks and obstacles while introducing advocacy, depending on the setting in which they work.

According to Khasnabis, Motsch, Achu, Al Jubah, Brodtkorb, Chervin *et al*., (2010) health professionals as change agents advocate for the health of the public by preventing diseases from occurring through instituting primary prevention initiatives. Change agents use their knowledge to teach communities about health-related matters. The World Health Organization (WHO, 2005) adopted the Ottawa Charter for health promotion in order for people to increase control over their health and to deal with factors that cause ill health." According to the American Journal of Health Promotion, health promotion is defined as the science and art of helping people change their lifestyle to move towards a state of optimal health". The primary health approach was launched and was key to meeting the health goals for all by the year 2000. In South Africa, through the National Summit (SANC, 2011) stakeholders and communities were urged to work in partnership in the prevention of diseases and the promotion of health and wellness (Dept. of Health Strategic Planning, 2016-2020). Anderson and Goode (2006) in a study conducted in the United States confirm the involvement of students as change agents in health promotion and illness prevention, which was found to have reduced mortality and morbidity rate. To illustrate further, activities that

were identified as effective in students' involvement are, giving students the opportunity to participate in wellness programmes, as well as giving health education to individuals and groups. The WHO (1998) assert that health education is an important tool which can be used by all healthcare workers to bring change in the lives of individuals and families. Walters, Spencer, Smukler, Allen, Andrews, Browne *et al*.(2016) ; Simons-Morton, McLeroy and Wendel, (2011) conclude that health professionals are in a better position to enforce quality on health promotion as they are well informed about guidelines and protocols of the organizations.

The National Burden of diseases has reported an increased mortality rate in South Africa for the past few years (Pillay-van Wyk, Msemburi, Laubscher, Dorrington, Groenewald, Glass *et al*., 2016). However poor adherence to chronic disease has been identified as a contributory factor expected to exceed globally by the year 2020 (WHO, 2003), but Ingersoll and Cohen (2008) indicate that there are factors associated with patients not taking their prescribed medication. Wagner, Austin, Davis, Hindmarsh, Schaefer and Bonomi (2017);Yasmin, Banu, Zakir, Sauerborn, Ali and Souares (2016) reveal that increasing interventions that promote adherence will improve the health of the public. Change agents will educate individuals about the importance of taking medication and the dangers of poor adherence, thereby leading to behavioural change. (McCullough, Ryan, Macindoe, Yii, Bradley, O'Neill *et al*., 2016). The Lancet (2012) report stated that through the United Nations millennium developmental goals the lives of men, women and children will be improved.

 Belle-Isle, Benoit and Pauly (2014) Report that community empowerment is a strategy used to address the social, cultural, political and economic determinants that underpin health.Clark (2015);

Horn and Brysiewicz (2014) describe community empowerment as the ability of people to gain understanding and control over personal, social, economic and political forces in order to take action to improve their life situations. Shrestha (2003) in a study conducted found that a community health empowerment health model had yielded good results in developing awareness skills and confidence in increasing women to accept contraceptives thus encouraging them to change their life. Change agents play an empowerment role and will empower communities with knowledge and skills. Wahid, Ahmad, Abu Talib, Shah, Tahir, Jan *et al.*(2017) raise concerns that political interference could hinder the empowerment role of change agents.

Agents of change build networks in order to construct community's problems collaboratively through structures (Yasmin *et al.*, 2016) that are available in the communities and they make necessary recommendations. Change agents as part of community structures and resources, are found to facilitate good communication in connecting stakeholders, NGOs and members of the community (Clark, 2015; Okello *et al*., 2015). Agents of change promote, facilitate and complement communities in obtaining control over their health issues and they form a part of the planning and implementation of outreach programmes. However, Grande and Srinivas (2001) suggest that change agents should be supported with a small amount of money to run their activities during their outreach programmes. According to Nxumalo, Goudge and Thomas (2013) community outreach activities in addressing issues of access and improvement have demonstrated benefits to the community; firstly changing the behaviour of the communities through empowering them with knowledge on skills and resources, and secondly improving participation between change agents and the dialoguer to construct meaningful knowledge in discussing issues that are of concern.

Change agents are considered as empowering communities on the social health determinants and services that are available in the communities which covers services such as environmental health, mental health, PHC clinics, and services for pregnant women and the children (WHO, 2011). In the same view Gruen, Campbell and Blumenthal (2006) in their study found that public involvement of doctors as change agents in community participation, political involvement, and collective advocacy rated as 90 per cent by respondents in the improvement of health related issues of the communities. Issues that are associated with public advocacy include drug abuse, nutrition, weight reduction, sanitation, reduction in air pollution, gun control, seat belt use, as well as responsiveness to health services were identified as problems affecting communities.

2.3. Theory Underpinning Community-Based Educational Programmes

Progressive philosophy as well as reconstructivism and critical theories underpin the curricula that promote the development of students as change agents. Theodore Brameld (1904-1987), one of the proponents of social Reconstructionism believed that schools should be utilised as a driving force for social and political change. Proponents of progressive education such as Dewey (1916) and others are of the view that there is no link between the schools and society, they function in isolation and they are not addressing real issues affecting societies. In addition, the proponents of progressive education argue that the environment of the school is mis-educative and the students are not prepared in such a way that they understand the values which they will later encounter as they become adults (Dewey and Childs, 1933) .The consequences of these beliefs led progressives to propose the creation of a new social order in schools. They further state that students can be encouraged to reconstruct society (Dewey and Childs, 1933). On the other hand, the social

Reconstructionist and critical theories such as Paulo Freire, who believe that education can be used as a social tool to bring about social change in encouraging people to improve their lives. Students as change agents through conscious raising could therefore became aware of the problems affecting communities and bring change in the lives of communities through education (Mc Menamin *et al*., 2014; Mezirow and Taylor, 2011).

The social reconstructivists view students as participating in democracy and becoming helpful, critical and reflective citizens who should take an active role in engaging community for common good. Dewey (1997) believes that teaching should be relevant to students and should facilitate students' consideration of the problems in taking up their ability to participate in civic life. Freire, (2000) recommends problem posing education which responds to the essence of consciousness and facilitates active learner participation.

Freire (1921-1997) believes in democratic education which allows students to express themselves freely and to state their purpose. Freire (2000) believes that human beings are not built in silence but in the world, in work, in action and reflection. According to the culture of silence people are created to be oppressed and the learner should develop a critical consciousness, which can be achieved through *praxis*. Kolb (2014) ; Freire (1973) further add that *praxis* is used by educators to describe repeated passage through a recurring process of experiential learning. Freire (1997) defines *praxis* as "a reflection and action directed at the structures to be transformed". He further believes that through *praxis* people who are oppressed can acquire a critical consciousness of their own situation and struggle for liberation. Through critical thinking, people can make decisions which will influence them to change their circumstances. Rudd and Comings (1994) concur with

Freire that critical thinking could be formed through dialogue with other people, change agents can have a dialogue and discuss issues and circumstances affecting the communities.

Role players during the process of dialogue are considered as equals and co-learners. The students will no longer be passive listeners but they will be co-critical, co-investigators in dialogue with the community. Freire (2000) describes dialogue as an encounter in which the united reflection and action of the dialoguers are addressed. Dialogue according to Freire cannot exist without humility, love, faith, and hope, which stimulates critical thinking. De Koning and Martin (1996) share a similar view with Freire stating that critical thinking, which takes place during such dialogue, analyses the deeper meaning of the circumstances. Freire regards this as true education. Communities, as they are posed with problems relating to themselves in the world, it is hoped that through dialogue they will feel increasingly challenged and will be obliged to respond to those challenges. Students can discuss personal, shared circumstances, from superficial discussions to in-depth discussions, with the communities and give guidance through solving issues affecting individuals, thereby taking a lead as change agents.

A problem-based learning and community-based curriculum is underpinned by these philosophies. According to Mtshali and Gwele (2015) ; Uys and Gwele (2005) the role of the teacher is to support and guide learners and to act as a facilitator, so as to allow learners to take a lead in the learning process. During facilitation the teacher does not transmit knowledge for the students but facilitates knowledge construction. Student-centred curricula with students actively involved in the learning process, solving problems, constructing knowledge should help students to achieve the expected outcomes and progress to the next level of training (Julie, Adejumo and Frantz, 2015; Mthembu, Mtshali and Frantz, 2014; Mthembu and Mtshali, 2013).

2.4. Developing Students as Change Agents

2.4.1. Rationale for developing students as change agents

Transformative learning has been found to be a tool which can be used to bring change in the educational system focusing on competencies that would have a positive impact in attaining skills that are relevant to bring change in the society (Frenk *et al.*, 2010). Transformation is explained as a marked change in nature, structure or appearance. Slavich and Zimbardo, (2012; Dictionary, (2006) view transformative learning as a process of using a prior interpretation to explain a new or revised interpretation of the meaning of one's experience in order to guide future action. These authors further cite learning approaches that are consistent with transformational learning namely, active learning and student-centered learning, collaborative learning, experiential learning and problem-based learning. These approaches are important because they engage students' higher order cognitive strategies such as analysis, synthesis and evaluation. Students are requested to articulate their logic and to consider various points of view when solving problems. These approaches expose students to focus on providing them with opportunities to identify and tackle complex, multifaceted challenges, hence through these approaches students have the potential to develop abilities to be change agents.

Leadership has been identified as a competency in which students are able to communicate their vision about what needs to be improved, consequently bringing about change in society. This is in agreement with DeSanto-Madeya (2007) who indicates that leadership skills improve problem solving skills, communication skills, research skills, presentation skills, and analytic skills, which are attributes required for agents of change. Change agents will be able to identify health problems and take a lead in health prevention and promotion by giving necessary information to the public.

It is therefore imperative for institutions to allow students to explore areas that they believe need attention and recommend solutions to bring the desired changes. (Dunne *et al*., 2011)

2.5 The Process of Developing Students as Change Agents

To deal with the challenges facing communities the WHO (1987) and ICN (2012) suggest that community-based education be used as a tool to develop students as change agents. Gruppen, Mangrulkar and Kolars (2012) ; Okayama and Kajii (2011) ; Frenk *et al.* (2010) also concur that through community-based education training of professionals will improve the competencies of health professionals, leading to achieving the health outcomes desired to improve the lives of disadvantaged communities. According to Villani and Atkins (2000) a community-based learning approach exposes students to problem solving activities in community settings, facilitating the development of problem solving abilities required in health professionals to render services to communities.

Mtshali and Gwele (2015) ; Ndateba *et al*. (2015) state that a community oriented curriculum should consist of problems identified in those communities to form part of the curriculum content. Placement of students in a good learning context will provide them with an opportunity to correlate theory with practice. The community will assist students to identify problems that are prevalent in the communities and as a result they will closely work with communities and take a lead in making necessary diagnoses and advise appropriately, consequently resulting in attaining competencies required from a practitioner who will work as an independent practitioner in identifying, diagnosing, implementing and executing nursing regimen in the community (ICN, 2012).

Irlam *et al*.(2016) conducted a study on medical students who were involved in a community-based learning programme. In this study medical students, who were viewed as change agents,

emerged as practitioners who can play an important role in advocating for the needs of underprivileged people through social responsibility. The model that was used in their community-based learning programme integrated a PHC approach which aligned medical education with the health needs of the society. According to Irlam *et al*. (2016) the curriculum exposed students to a clinical settings for a period of four weeks in order to integrate the principles of primary health approach. The study revealed that through community-based education, people-centred care was provided by the students, involving families in health promotion activities and by also involving community in community-based interventions. The students as change agents assisted in raising consciousness of communities on social issues that affect communities, thereby changing their behaviour. It is essential that change agents are equipped with the skills required to meet the comprehensive health challenges of communities (Irlam *et al*., 2016).

 In social work, programmes that are community-based focused on students as change agents reported by Walters *et al*. (2016) that through collaboration with other universities in community projects demonstrated success in conducting community services which had an improvement in reducing crime rate, improvement in infrastructure and provision of basic services to the community, which led to behavioural change in the communities. In addition, community-based education as an approach used to develop social workers as change agents revealed that during their preparation they were guided by a plan which clearly defined their encountered problems, had an alternative solution and consequently chose the best solution while solving individual, family and community health problems.

Literature shows that developing students as change agents requires a paradigm shift in the role of the teacher, with the students playing an active role in the learning process. The teachers' role is

that of facilitating the learning process and exposing the students to learning activities that facilitate their development as change agents (Mtshali and Gwele, 2015). Developing students as change agents allows students to express their views, which will lead to the creation of self-motivation and thereby striving for success. Bryson (2016) believes that allowing the voice of students to be heard and involving them in the designing and development of their own curriculum will yield positive results as students are the beneficiaries of their own learning. Freire (2000) recommends that a dialogical approach in learning gives learners more control over their own curriculum. It allows the students to learn how to learn through their own experiences.

According to Thabet, Eman, Abood and Morsy (2017) teachers should provide interesting content for their students and involve them in planning topics to be presented in class, and a common goal should be reached. However, Wlodkowski and Ginsberg (2017) are of the view that there is no specific plan available to motivate all students in the classroom as there are factors affecting individual students to be motivated to learn. Decisions that are imposed on students result in a lack of responsibility and commitment. Students should therefore form part of the decision-making process on issues concerning their training so that they can be actively involved in bringing change in the society (Nilson, 2016). The above authors, Thabet *et al*. (2017) ; Nilson (2016)) share a view that through engagement between the learners, communities and the facilitators, students will be able to share ideas and construct meaning through dialogue which will motivate them to develop critical thinking and problem solving skills.

According to Mthembu and Mtshali (2013) facilitators are to create an environment which is conducive for learners to construct their own knowledge, skills and values through interaction.

Uys and Gwele (2005) ; Matteson (2000) are of the view that in outcomes- based education teachers act as facilitators and mediators of learning rather than transmitters of knowledge. It is believed that teachers will be able to facilitate learning, which will stimulate the development of problem solving skills. These agree with Dewey's teaching of pragmatism, which highlights that teacher dominance in the classroom is seen as limiting the participation of students in the acquisition of knowledge.

Literature has revealed that teacher facilitation improves teaching and learning outcomes, leading to the development of skills required for students to be change agents. DesSantos-Madeya (2007) list them as critical thinking skill, decision making skills and problem solving skills. Moreover Holen (2000) supports the view that change agents should come together with facilitators at least once a week to reflect and give feedback on what was learnt during their encounters with the communities. In conclusion the nature of the teacher should raise the awareness of the learners and be seen as a mediator of knowledge by stimulating critical thinking and reflection to the learners.

The social reconstructivism view students as participating in democracy and becoming helpful, critical and reflective citizens who should take an active role in engaging community for common good. Dewey (1997) uses pragmatism, and believes that teaching should be relevant to students and should facilitate students' consideration of the problems in taking up their ability to participate in civic life. However, Freire (1970) does not agree about situations where the transfer of knowledge occurs in the presence of passive learners, he calls it 'banking education'. Education thus becomes the act of depositing, therefore students become depositories and teachers are the depositors. Freire (2000) recommends problem-posing education which responds to the essence of consciousness and facilitates active learner participation.

Literature reveals that student-centred learning is a form of teaching that gives students opportunities to take the lead in learning activities, participate actively in discussions, design their own learning projects, explore topics that are of interest to them, and contribute in structuring their own course of study (Struyven, Dochy and Janssens, 2010). The aim of student-centred learning is to develop students' autonomy and independence, allowing them to develop problem solving skills thus making their own judgments (Shin, Sok, Hyun and Kim ,2015 ; Nilson, 2013; Hannafin and Hannafin, 2010). Additionally Lee and Hannafin, (2016) adds that student-centred learning develops students on skills and practices that allow them to continuously become self-motivated taking an active role in their learning by moving out of the classroom into the communities and apply their learning experiences to real life situations, similarly with the principles of community-based education that utilizes the community as a learning environment (WHO, 1987). The above authors,Shin *et al*. (2015) ; Nilson (2013) ; Hannafin and Hannafin (2010) confirm that student-centred learning can be used by change agents as a tool to reach their goal in bringing change and transform the lives of the people.

The nature of the learners is described in terms of certain characteristics which students are required to have in order to influence change. According to Anderson, Calvillo and Fongwa (2011) ; Mtshali (2009) the following characteristics are identified: 1) Students as contributors into the curriculum content so that their interests and needs are taken care of, 2) role players in ensuring that the curriculum content is community oriented and is derived from the common problems in the surrounding community, and 3) they are to be contributors to knowledge and actively engaged in the process of knowledge construction; they are to provide a service to those with limited access to healthcare services by rendering home visits in the communities. On the other hand, Park and

Lee (2014) list attributes that are required for students to possess that will allow an environment where there is sharing of ideas and learning from each other. Students need to be respectful, sensitive, and tolerant; these will ensure collaboration and a partnership which will yield good results. Change agents are to act as: advocates, counsellors, facilitators, and experts as well as a mediator. These roles are further utilized by change agents in the process of educational innovative such as negotiating, collaboration, team building, initiator, communicator and leadership (Carr, Hard and Trahant, 1996).

Studies conducted by Allen and Baughman (2016) ; Mtshali (2009) reveals that active learning helps in the development of a number of life skills such as self-directed learning, analytical and critical thinking skills, problem solving skills, communication skills and team work. These skills are important to produce graduates who will perform their duties independently and working in groups, learn from each other and share ideas, and will facilitate the gaining and retention of knowledge which will nurture characteristics such as unselfishness, helpfulness, critical intelligence, individual initiative, which are relevant for agents of change. This is echoed by Mbeki's (2017) speech during his inauguration as a chancellor at the University of South Africa who stated that: "students must be thinkers and accumulators of knowledge rather than regurgitation of facts, so that they become change agents in bringing change in our society" (University of South Africa, Vice Chancellor 2017).

In view of the above there is consensus among authors that change agents are expected to question and challenge the status of the community and think critically by using problem solving skills in identifying health issues and come up with solutions.

Discovery-based learning is a method associated with inquiry-based learning and it is believed that learners best learn when they discover facts about learning themselves which is connected to a constructivist's approach to education (Pedaste, Mäeots, Siiman, De Jong, Van Riesen, Kamp *et al*., 2015). According Uys and Gwele (2005) the learning process follows Kolb's four staged cycle; concrete experiences, reflective observation, abstract conceptualization, and active experimentation. At the heart of these processes students will be able to develop more understanding on the application of the key course concepts. The process begins by allocating students in clinical learning sites where they become fully immersed in the new learning experiences. Students conduct community surveys in order to identify social problems and the health needs of the community, plan and implement interventions. Students are given real life scenarios, they face challenges while solving these problems on their own.

Through self-directed learning students take up an initiative to consult teachers and give feedback on what they have learned during their clinical placement in the communities. Avdal (2013) reports that self-directed learning is a method widely used in adult education and has shown positive results in improving the learning abilities of students in Turkey. Students as change agents link their experiences by interpreting their clinical learning experiences and sharing them with one another. Change agents will use their experiences to draw up conclusions on problems and learning, identify gaps and take remedial action. Learning through reflection requires students to not only acquire the skills but involves a process of personal deconstruction and rebuilding.

Community-based education promotes collaborative learning. According to Laal and Laal (2012) collaborative learning is a state where two or more people learn something together with an aim of solving a problem. Srinivas (2011) gives a view that in collaborative learning all students act as change agents and have an opportunity to engage with each other and exchange ideas and views. Smith and MacGregor (1992) add that in collaborative learning students and teachers are mutually searching for meaning and finding solutions, hence teachers do not see themselves as transmitters of knowledge but as expert designers of knowledge. However, challenges such as managing group activities and lack of understanding was found to be difficult in terms of curricular planning and availability of time due to change in the roles and responsibilities of both teachers and the students, these might create confusion in terms of power sharing (Gillies and Boyle, 2011; Kohn, 1992). In summary collaborative learning prepares students to work in teams and encourages the sharing of ideas, leading to creating an environment in which differences are resolved and which fosters the abilities required to work with people in the community.

2.6 The Learning Approaches used to Develop Students as Change Agents

There is emerging evidence that suggests the involvement of educational approaches that facilitate lifelong learning into the curriculum. The following approaches have been approved in the development of students as change agents.

There has been overwhelming support worldwide in shifting the traditional way of teaching to the new system of teaching. The traditional way of learning lacks specific content and learning takes place in a vacuum. Literature has revealed reasons that have necessitated the need for a paradigm shift from traditional to a new system. (Department of Education, (DoE, 1997). Spady (1994) indicates that calendars and time-tables were used as a means of control, content was arranged in subjects, learning was self-contained and learners were in competition with each other. During the

year 1960, Americans contested for change in the educational system that was to focus on improving life skills. This led to the introduction of the competency-based movement and mastery learning movement.

In South Africa change needed to occur so that the training and education system is in line with international standards in order to produce professionals who will be skilled to meet the demands of the population. The National Qualifications Framework (NQF, 1996) outcomes-based education (OBE) is a model that was introduced in 1998 as curriculum 2005 in South Africa. Spady (1994) defines "OBE as a comprehensive approach that deals with organizing and operating an educational system that is defined by the successful demonstration of learning required from individual learners". Malan (2000) asserts that OBE promotes an interchange of knowledge between learners and the curriculum, where the learner comes into understanding with reality, and takes responsibility for their learning outcomes; these are aspects which are covered in the competency-based learning movement. According to Malan (2000) in mastery learning, the role of teachers is to guide the learners rather than to be sources of information and learners are provided with an appropriate learning environment, learning material and guidance. The mastery learning movement shares the same characteristics as OBE in that it is, needs driven, outcomes driven and the focus shifts from teaching to learning which is required to develop students who will use reasoning skills and creative thinking in identifying and solving problems encountered by communities. Malan (2000) agrees that learners who are a product of OBE develop good communication skills, which enable them to work in teams, develop research skills, and technology in solving problems. McKernan (1993) mentions limitations with outcomes-based education in that the outcomes' standards may not be understood, or may be wrongly perceived,

and challenges with facilitators complaining of workload were reported. However a positive impact was noted that outcomes-based education provides learners with the purpose of achieving their destination (Eldeeb, 2013).

2.6.1 Problem-based learning

Problem-based learning evolved from the health science curricula which was introduced in North America 30 years ago. (Bound and Feleti, 1997) state that PBL is an approach that has been used in medical disciplines to prepare dentists, nurses, paramedics, radiologists, etc. According Mansur, Kayastha, Makaju and Dongol (2014) ; Barrows (1994) this method was found to be effective in answering concerns brought about by the traditional lecture-based method of education for medical practitioners. Problem-based learning is defined as an approach to teaching and learning whereby students are divided in small groups to deal with problems affecting communities, and a facilitator is available to do supervision (Sockalingam and Schmidt, 2011; Uys and Gwele, 2005; Barrows, 1994). Savery (2006) further adds that this approach is learner-centred as it allows students to conduct research, integrate theory and practice, and apply knowledge and skills to come up with solutions to a defined problem.

Literature reveals that schools of nursing were using traditional methods in preparation of nursing students. During the process of learning students were passive and there was no active involvement in the learning process (Mtshali, 2009; Fichardt, Viljoen, Botma and Duran, 2000). It is expected that students are to take an initiative in directing their own learning than to passively wait for the teachers to spoon feed them with information (Mtshali and Middleton, 2010).

In problem-based learning (PBL) students use 'triggers' from the problem case or scenario to define their own learning objectives. The facilitator gives guidance to the students about the learning process by doing interviews at the end of the learning experience. Adejumo and Ganga-Limando (2000) report that problem-based learning has been attributed to improving problem solving skills, team work, developing critical thinking skills, increasing motivation, and helping students learn to transfer knowledge to new situations. Dunne *et al*. (2011) agree that permitting students to have a voice by allowing them to participate in committee meetings, conducting surveys and other forms of feedback has assisted in the development of critical thinking skills, communication skills and leadership skills which are attributes required for change agents.

Literature revealed some advantages and disadvantages with regard to problem-based learning and they are stated as follows: Firstly, it encourages student-centred learning which adopts active learning, improved understanding, retention and development of lifelong learning. Secondly, it motivates students and tutors to develop interest, and the process requires all students to be engaged in the learning process. Conversely, problem-based learning requires a burden of work on the part of the teachers and the students which includes learning objectives, the learning process and assessment; and it requires additional resources such as libraries, computer services, classroom space, clinical facilities which may be inadequate to facilitate self-directed learning (Woods, 2007 ; Billings and Halstead, 2005 and Badeau, 2010).

Self -directed learning has been identified as one of the strategies that enhances problem-based learning. Knowles cited by (Williamson, 2007) describes self-directed learning as a process in which individuals take the initiative with or without the help of others in diagnosing their learning needs, setting learning goals, identifying resources for learning, choosing and implementing

learning strategies and assessing the value of the learning outcomes. This is approved by Loyens, Magda and Rikers (2008) who indicate that through self-directed learning students are able to own and manage their learning process. Students participate in decision making with regard to the curriculum content and how it should be evaluated. Taylor added the significance of allowing learners to follow their own interest for learning to become useful. According to Tiwari, Lai, So and Yuen (2006) this approach is found to focus on learning in which students are working on real-life problems in the classroom, consequently exposing them to deal with real-life problems. This is commended by (Dewey, 1938) who agrees with the beliefs of a 'progressive education' which advocates for thought and action combined together in the classroom and real-life settings. PBL benefits the students in developing critical thinking skills, problem solving skills, communication skills and lifelong learning, thereby becoming agents of change (Şendağ and Odabaşı, 2009; Yuan, Williams and Fan, 2008; Tiwari *et al*., 2006)

2.6.2 Blended learning

The blended learning approach has been described as a pedagogical approach that has been significantly helpful both in the classroom and in the use of technology in enhancing active learning on the online environment. Literature has revealed that blended learning is the most efficient teaching model which combines self-paced learning, live e-learning, and face-to-face classroom learning (Vaughan, 2010; Vaughan, 2007). This approach is flexible and convenient for students to access the facilitators and content everywhere and anytime. Facilitators provide support to students by giving instructions and feedback through online activities. Blended earning encourages open and free communication with critical debate and negotiation between the facilitators and the students, which allows interaction between students, students and facilitators, and other resources used for instructions (Vaughan, 2010; Vaughan and Garrison, 2006).

2.6.3 Community-based learning

Community-based learning is used as an approach to facilitate the learning process both in the classroom and in the clinical setting. During the process of learning the community becomes partners in the learning process. Bound and Feleti (1997) ; Valerius and Hamilton (2001) agree that the process of learning should utilize real life situations in order for students to adopt partnerships with the community in analyzing their problems.

It is reported that students are able to conduct research, projects, collect and analyze data and share their results with the facilitators and communities. Advantages of community-based learning include facilitation of active learning, experiential learning and collaborative learning. Active learning has been associated with increasing student's involvement in the learning process allowing students to do most of their work. The following strategies have been reported to produce positive results in active learning: firstly, reading, discussing and writing skills promote the development of communication skills required for graduates to work independently after completion of training; secondly, active learning involves students in higher order thinking which stimulates critical thinking, therefore allowing students to focus more on developing skills that transmit information.

2.6.4 Community Service Learning

The term community service learning is used interchangeably with community-based learning. According to Rodgers (2001) ; Stover, Bach and Carver (2016) community service learning is a teaching and learning model in which students leave their classrooms to meet the needs articulated

by a particular community. Literature has revealed that community service learning can be traced back to strong pedagogical traditions rooted in the works of John Dewey (1916; 1938) and Paulo Freire (1970; 1985). These authors claim that there should be a collaboration between the community and universities' faculty members taking a lead in the education process, consequently taking care of the needs of the community. Carlisle, Gourd, Rajkhan and Nitta, (2017) ; Stover *et al*., (2016) ; Heffernan, (2001) agree that community service learning will allow students to become involved in service initiated activities to promote social change, thus liberating people from oppression. Rodgers (2001) mentions that learning that is provided through service enables one to develop empathy and obligation to the service, consequently allowing the development of good interpersonal relationships between the clients and the students. It is believed that students as change agents will develop these attributes as they interact with members of the communities.

 According to Harrison (1987) one of the objectives of service learning is to direct the learners to practical settings where the primary motivation is service, furthermore learning takes place as students take part in the experience and as they reflect upon what happened during the experience". There is evidence that service learning achieves better academic grades than peers with classroom only instruction (Markus, Howard and King, 1993).In the same way Kronick (2007) ; Strage, (2004) are of the view that the learning gained by service learners is significantly higher than peers when using essay rather than multiple choice examinations. Furco (1996) Adds that students engaged in service learning make use of reflective journals to analyze community experiences in relation to course objectives, received, personal values and solution focused actions.

2.7. The Clinical Learning Sites Utilized for Experiential Learning.

John Dewey, Carl Rogers, and David Kolb are acknowledged as educational philosophers who explored the ideas of experiential learning during the 20th century. This is represented by Kolb's four-cycle of experiential learning. Learning is defined by (Kolb, 2014) "as a process whereby knowledge is created through the transformation of experience" . Students are given the opportunity to learn by doing and reflecting on those activities and applying their theoretical understanding inside and outside the classroom as stated by Dewey (1938). Jarvis (2004) ; Bound and Feleti (1997) believe that the active engagement of students will result in engagement with the content resulting in meaningful initiatives.

A clinical learning site refers to the physical location where services that promote health and provide care to individuals and groups is used to teach learners; facilities and resources which are available for the delivery of education and training of learners (SANC, 2013). The aim of clinical placement allows students to be oriented in community health practice and to be able to apply their knowledge and skill in a real-life situation. WHO (1987) ; Talaat and Ladhani (2014) ; Kruger *et al*.(2015) advocate that this will allow students to utilize the community as a learning environment, which will promote collaboration and active involvement between students, stakeholders and communities throughout the learning process.

 Nambozi and Locsin (2016) recommends that there has to be a paradigm shift from hospital-based education to community-based education in order to prepare professional nurses who will be equipped to meet the needs of the South African population. According to Uys and Gwele (2005) learning sites such as homes, clinics, police stations, and schools could be used for community-based exposure as they are regarded as real-life situations. Basically, the curriculum focuses on

learning activities that utilize the community extensively as a learning environment. Mabuza, Ntuli, Diab, Flack, Cakwe, Molefe *et al*. (2013) ; Mtshali (2005) concur that community-based education is defined by the setting in which learning takes place.

Studies WHO (1987) ; Diab and Flack (2013); Ndateba *et al*. (2015); Mabuza *et al*. (2013) agree that this approach is conducted anywhere people live, which could be in rural, suburban, or urban area. During the educational experience there is an active involvement between students, teachers, members of the community and representatives of other sectors so that everyone benefits. Community-based education is an approach which is vital in identifying the needs of the community and enhancing the development of students as agents for change in solving real problems facing the communities. Salmon and Keneni (2004) concur with both authors that community-based education is conducted in the community in order to allow students an opportunity to correlate theory and practice in assessing, planning and participating in solving community health problems. Madalane (1997) adds that students are allocated in a setting in order to be familiarized with individuals and groups that are healthy, concentrating on health promotion and illness prevention. The students will later be allocated in primary healthcare clinics, hospitals and rehabilitation centres. According toMtshali and Gwele (2015) ; Mtshali (2009) this approach will equip students comprehensively allowing them to provide care at all levels of the healthcare system. Anderson *et al*. (2011) add that through community involvement students are able to learn about cultural diversity which is facilitated through the clinical settings. To explain further, Mthembu *et al*. (2014) indicate that this gives a suggestion on the type of curriculum content which must be relevant and responsive to address the needs of the community. Mtshali (2009) reports that in community-based education students are prepared in special blocks prior to placement in the community as an orientation to the course, this ensures that students have the necessary

knowledge about concepts of PHC and CBE. Students are placed in community-based centres during their first year of study. Uys and Gwele (2005) advocate that human resources, accommodation and transport must be available and accessible to cater for students' needs while allocated in the learning sites.

2.8. Conditions that Facilitate the Development of Students as Change Agents

Clinical placements of student are facilitated by nurse educators who are also referred to as preceptors or clinical supervisors. According to Chipchase, Buttrum, Dunwoodie, Hill, Mandrusiak and Moran (2012) supervision of students during the process of teaching and learning is key. It is expected that during clinical placement there should be a mutual relationship between preceptors and students, which is fundamental to the accomplishment of the learning objectives. In opposition Kilminster, Cottrell, Grant and Jolly (2007) ; Madalane (1997) note that the absence of supervisors during clinical placement of students has contributed to a shortage of supervisory skills that have been identified as one of the skills required to give assistance to learners in developing them as change agents.

According to Dale, Leland and Dale (2013) a good relationship between students and mentors should be created, displaying respect, openness, friendliness, helpfulness and an exchange of ideas which will facilitate an environment conducive for learning. Likewise issues related to corrections and disapproval should be treated in a constructive manner to promote working together. Holen, (2000) further states the importance of students and preceptors conducting regular reflection and dialogue which is reported to have produced good results. Facilitators should always be available to share their time in order to attend to the needs and concerns raised by students (Dale *et al*., 2013). Regular appointments and feedback has been found to improve communication between

agents of change and preceptors. Facilitators should appreciate students and treat them as equals. In conclusion it is imperative to have good communication between facilitators and students as this will allow facilitators and students to share their experiences, views and feelings, and construct new meaning.

Facilitators prepare students formally during the commencement of training in preparation for the new learning experience; for example, by developing an orientation programme outlining the objectives of the course, and what is expected of the students during placements, as this will allow students to take full advantage of their clinical opportunity. This is seconded by Chipchase *et al*., (2012) who conducted an online Delphi study in Australia, the results revealed that Allied health students from occupational therapy, physiotherapy and speech therapy were found to be well prepared at the commencement of their training. The planning involved developing an orientation programme which outlined all the objectives to be achieved during the course.

Graduate attributes play an important role in developing students as change agents. Healthcare practitioners are to integrate all graduate attribute roles by having necessary knowledge and skills while providing service to the clients. Dufour, Lucy and Brown (2014) agree that the roles which are required by physiotherapists as agents of change during clinical placements are; collaborator, educator, evaluator and advocate. Amalba *et al*. (2016) is of the view that good communication, leadership skills, and interpersonal skills are attributes that lead to influencing doctors to be willing to work in communities while doing community-based education. Personality traits which include passion, commitment, caring and tolerance to each other are counted amongst other conditions that promote good relations in the development of students as change agents. Students need to show

respect in order to win the hearts of the people thereby meeting their needs (Anderson *et al*., 2011). To elaborate, more students come across people from different cultures in the community and it is imperative to respect the cultures of the people as this will promote good relations. This is in agreement with Amalba *et al.* (2016) and Anderson *et al*. (2011) who state that respecting different types of cultures, attitudes, values, and customs that are available in the communities, and speaking the same language was found to promote therapeutic relationships. In the same view Mabuza *et al.* (2013) in a study conducted, identified religion and culture as a barrier during community participation of students, but suggest that students should have an understanding of the language and culture of the community in which they are working in order to maintain good interpersonal relationships. Language is considered as a barrier in maintaining good communication.

Teamwork has been identified as another condition that facilitates the development of change agents. Teamwork allows the opportunity for a group to become more acquainted with each other and be able to work together, thereby creating a positive working environment. This is attested by Fielding (2001) who reports that a group of second-year students acted as consultants during a research project while offering guidance to first-year students, not on a regular basis. Change agents should therefore work as a team with peers, colleagues, and other health professional as this will promote sharing of ideas and improve relationships.

Institutions of higher learning should provide students with libraries so that they have access to sources of information which include Wi-Fi, the Internet, books and journals. The use of technology as a form of communication to convey messages between the students and the preceptors has been listed among successful innovative teaching strategies to achieve student

outcomes. Harerimana, Mtshali, Ewing, Maniriho, Kyamusoke, Mukankaka *et al*. (2016) conducted a study and the results showed that an online learning environment was approved by students as a method which influenced their success.

Motivation is regarded as a good tool to learn, through self-directed learning it is expected that students should develop an interest in the learning process. Students should be willing to take responsibility of their own actions, have leadership skills and be able to display a good appearance. Cercone (2008) lists the characteristics which students as self-directed learners should have: self-determination, resourcefulness, persistence in learning, develop self-control, self-reliance and be willing to learn. These characteristics influence the student to adapt to change and take responsibility for their own learning.

Literature revealed some barriers which can hinder the development of change agents which are identified as a lack of resources. Lack of resources is perceived as a barrier which can impede the learning process from occurring. Resources can be divided into human and material. In the absence of the above resources, community-based education programmes cannot be implemented successfully, taking into consideration the students benefit in the learning process. This is confirmed by Dreyer, Couper, Bailey, Talib, Ross and Sagay (2015) who conducted a study in Botswana, Nigeria, Tanzania, South Africa, Uganda, Zambia and Zimbabwe with the purpose of evaluating the effectiveness of the CBE programmes. The results revealed challenges listed as: 1) inadequate number of supervisory staff at education sites, 2) few institutions offering training, 3) lack of clinical space, 4) lack of accommodation, 5) shortage of transport, 6) lack of internet connectivity, 7) increased medical student enrolment leading to overcrowding on community sites,

8) lack of clear objectives, 9) innovation, and 10) lack of compliance with CBE programmes. (Lin-Siegler, Dweck and Cohen (2016) came to the view that physical conditions such as large and small classrooms, lack of equipment, lack of support from the teachers and the university, poor relationship between teachers and students, and a lack of knowledge from the facilitators, have been identified as affecting students' motivation to learn. These conditions may result in students developing a lack of interest in meeting their intended goals.

It can be concluded that these barriers are regarded as the basic necessities which must be available during the learning process to impact positively on the development of students as change agents.

2.9. Outcomes of Developing Students as Change Agents

According to Miller (2016) ; Harmon and Hills (2015), CBE has been reported to improve learning among students and increases group participation and collaboration. Kaye, Mwanika, Burnham, Chang, Mbalinda, Okullo *et al*. (2011) agree that students develop the role of developing students' participation in teaching and learning by being involved in programmes which enhance public speaking thereby empowering others in leadership, communication skills and critical thinking skills thus commanding action towards change. Development of students as change agents contributes to producing students to meet the standards of being professional nurses; this is achieved by developing qualities of being role models which is primary to the professional socialisation of change agents. Caplin (2016) mentions that it is imperative to have role models socialising students on the professions to enhance professional and caring qualities.

McCleskey and Berrios (2016) state that emotional intelligence is related to leadership abilities and has been shown to enhance leadership skill by enhancing self-awareness, self-management, social awareness, and relationship management which are attributes required for agents to have.

Furthermore, McCleskey and Berrios (2016) state that change agents develop certain attributes such as, the ability to communicate effectively, fearlessness, motivation, visionary toward the future, role model, knowledge and clinical competence, trustworthiness, participation in partnerships, honesty about self and others and empathy. These attributes have been found to be effective in promoting change. Miller (2016) notes that as students are placed in the communities they come across people with different backgrounds, and it is expected that they should provide service disregarding individual cultures. According to the Nursing and Midwifery Council (NMC) (2010) standards are set regarding nurses' pre-registration in that students need to be fully equipped with knowledge on diversity in terms of culture, race, religion and ethnicity before they can be allocated to do service in the community. Haynes, Lisic, Goltz, Stein and Harris (2016) ; Nambozi and Locsin (2016) ; Papastavrou, Lambrinou, Tsangari, Saarikoski and Leino-Kilpi, (2010) give the view that placement of students in the clinical areas enhances the development of critical thinking skills which is essential in the practice of practitioners. Students develop characteristics which are attributed to change agents by modelling change behaviour and in bringing about change in the education process. These characteristics relate to self-directed learning (being eager to learn and reflective), mastery (giving guidance, being accessible, positive, committed, trustful, and self-assured), entrepreneurship (being innovative and feeling responsible), and collaboration (being collegial).

The shortage of skilled health professionals has been identified as a barrier to the right to health in rural South Africa (Gaede and Versteeg, 2011). It is believed that providing skilled professionals will bridge the gap of the shortage of nurses, who will provide service to the community. The WHO (2007) identifies access in terms of financial, population and coverage of services. A number

of disadvantaged communities lack access to healthcare services due to a shortage of transport to reach the services. Agents of change will reach out to communities by participating in providing healthcare services which includes increasing access to healthcare services as set in the primary health care approach. Change agents use community outreach programmes as a tool to increase access by educating or informing communities thereby increasing their knowledge, skills and raising awareness. A report by Gaede and Versteeg (2011) on the state of the right to health in rural South Africa suggest that there is still a challenge in rural communities to access healthcare services. Students as change agents play a major role in providing services to the communities by bringing such services to the people.

According to Freire (2016) consciousness raising is a process through which people come together to discuss the relationship between individual or group experiences or concerns and the social or structural factors that influence them. Students are able to identify social issues affecting communities by considering how their concerns can be translated into actions as they learn about social responsibility. Through partnerships between communities and change agents they are able to increase community support in addressing specific health inequalities and their causes. Change agents will help individuals and groups identify specific social determinants or structural factors to develop goals and objectives for change. Approaches that are used in the process generate discussion by asking individuals to share their experiences and encourages critical reflection in order to analyze their experiences. Individuals identify themselves through sharing their skills and resources by analyzing problems, planning, implementing and evaluating strategies to be used in meeting identified needs (Freire, 2000; 1973). Change agents listen to sessions and present

situations encountered by communities and present evidence in the form of a community profile, by keeping photographs or pictures which will be used for future references.

The WHO (2014) describe health education as the giving out of health-related information and the development of motivation, skills and confidence (self-efficacy) necessary to take action to improve health. Health education also addresses social, economic and environmental conditions that are also impacting on health. Social determinants on health have a negative impact on the health status of the nation, but through community based programmes change agents encourage, and improve health and wellness by educating communities in health prevention and promotion on topics such as nutrition, oral, tobacco use, substance abuse, nutrition, physical activity and obesity prevention. The WHO (2012) agrees by indicating that health educators in organizations and government agencies assist communities to identify their needs considering their problem solving capabilities and organize their resources to develop, promote, implement and evaluate strategies to improve their own health status. Communities should believe that the recommended health action by change agents will change their behaviour if they comply. Change agents ensure that communities are able to solve their problems for themselves and make sure that they are skilled and become self-reliant. Minkler and Wallerstein, (2011) ; Plescia, Groblewski and Chavis (2008) state that change agents will develop health promotion programmes aimed at bringing about behavioural change which will consequently lead to social change.

Several initiatives have been started by students taking into consideration the development of research projects, and recommendations presented have led students and staff engagement in improving practice and policy in higher education. This is advocated by Healey (2012a) ; Dunne

et al. (2011) who indicate that students as change agents mirror the image of their school and the training institutions. Engagement of students in curriculum development has proved to bear positive results in improving curriculum content. This is presented by Healey (2012b) who showed that students as partners assisted in developing a new institutional curriculum at Olin College by inviting students to be part of giving suggestions in the structuring of the curriculum and conducting of assessments. In the same view Cook-Sather, Bovill and Felten (2014) ; Bovill, Cook- Sather and Felten (2011) provide information that involving students in designing the assessments allows them to have more knowledge about assessment principles and processes, which will inspire them to achieve good results. Students' voice permits participation of stakeholders, community members, faculty members and students in surveys, committee meetings to improve teaching and learning in the implementation of assessment strategies (Healey, 2012a).

A study conducted at the University of Exelter revealed that students as change agents led a research project on the use of technology and integrating it into the curriculum. It was found that students used multiple choice questionnaire software for formative and summative assessments; used wikis in sharing group work and blogs to record and communicate project progress (Bovill *et al.*, 2011). Further, it is reported that lecturers used Turnitin, an internet based plagiarism-detection service, to reduce potential plagiarism on the assignments submitted by students .The results indicate that there was a transformation on the practice focusing on student and staff support, as well as an enhancement of learning. Through service learning students participate in democracy and social justice as part of the university experience, with an aim of producing graduate attributes which will respond to the needs of the community (Dunne *et al.*, 2011).

2.10. Conclusion

The review of the literature revealed that perceptions of students as change agents are viewed as problem solvers, action researchers who are health advocates for the vulnerable and have an advocacy and empowerment role, while taking care of the problems encountered by the communities. Community-based transformative learning is a teaching strategy that can be used to bring change in the society. Recommendations are highlighted.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This section provides a detailed description of the research design and method that the researchers have employed. Aspects that are covered include details on the research paradigm used, the research design, research setting and the population, sampling and sample size. It will also cover the data collection methods and instruments, data analysis, and ethical standards which is described in more detail. According to Polit and Hungler (2001) methodology is defined as "procedures for obtaining, organizing and analyzing data". The researcher has selected to undertake a qualitative study to explore whether community-based education programmes develop students to become change agents.

3.2. Research Paradigm

The study follows a constructivism paradigm. A paradigm is a way of looking at a natural phenomenon that encompasses a set of philosophical assumptions and that guides one's approach (Polit and Beck, 2014). Constructivism is built upon the premise of a social construction of reality. One of the advantages of this approach is the close collaboration between the researcher and the participant, while enabling participants to tell their stories, through these stories the participants are able to describe their views of reality and this enables the researcher to better understand the participants' actions (Baxter and Jack, 2008). The constructivism paradigm will seek to construct meaning by interacting with the participants of the study about the experience of students as they are being taught community-based education and to apply it as they conduct their service learning.

The researcher aims to explore the meaning attached by students as they are the recipients of the programme.

3.3. Research Design

Research design is a general plan for conducting a study about how to get answers to the research questions (Groove, Susan and Gray, 2013). According to Polit and Beck (2008) in qualitative studies the researcher uses the design that emerge as the study progresses and reflects on what has already been learned The researcher has used the exploratory descriptive qualitative method. According to Grove *et al* (2013) exploratory descriptive studies are conducted in order to address a problem which needs a solution. Wood and Haber (2014) further state that qualitative research is discovery orientated, it is explanatory and descriptive in nature, furthermore it uses words instead of numbers. The philosophical underpinning of exploratory descriptive qualitative studies is that the source of information can be derived from the person living the experience (Polit and Beck, 2008). According to Grove *et al* (2008) the purpose of descriptive studies is to observe, describe and document aspects of situations as they naturally occur or a starting point of theory development. The research design has been chosen to explore whether the community-based transformative programme equips students to become change agents. In this study the researcher has conducted interviews herself to collect data using focus groups of students who have been exposed to a community based transformative programme at a selected higher education institution in KwaZulu-Natal for the year 2016.

The study is framed by the qualitative approach. Strauss and Corbin (1990) describe qualitative research as a type of research that produces findings not arrived by statistical procedures or other means of quantification. Grove *et al* (2013) describe qualitative research as a systematic,

subjective, holistic approach used to describe life experiences and give them meaning. Both these authors assert that qualitative methods are applicable to research that attempts to understand any phenomena about which little is yet known. Furthermore, Marshall and Rossman (2011) state that qualitative researchers are of the opinion that truth is both complex and dynamic and can only be achieved through studying individuals as they act together with and within their socio-historical settings.

3.4. Research Setting

A research setting is a location for conducting research which may be natural, partially controlled or highly controlled (Grove *et al*, 2013). Qualitative researchers collect data in a real world or naturalistic settings (Polit and Beck, 2014). The study is conducted in a nursing education institution in KwaZulu-Natal. The research setting is relevant to the researcher and has been identified as having a well-established community-based nursing education programme, and is well-known by other institutions in South Africa (Mtshali, 2009).

3.5. Population

Population refers to the entire group of persons or an object that is of interest to the researcher or in other words that meets the criteria the researcher is interested in studying (Polit and Beck, 2008). The target population of the study is composed of all registered nursing students at $2^{nd,}$ 3rd and 4th year level of a Bachelor of Nursing programme at the selected school of nursing in KwaZulu-Natal. These students have characteristics of interest in the research as the 3rd and 4th year level students were previously exposed to the community-based nursing education programme. A total number of 180 registered nursing students in second, third and fourth years of the Bachelor of Nursing programme in the year 2016 were considered as the target population of the study.

3.5.1. Sampling Method

This refers to a subset of a population selected to participate in a study (Polit and Beck, 2008). Sampling is the process of selecting a portion of the population to represent the entire population. The selected elements are then referred to as the sample (Polit and Beck, 2008). A non-probability sampling technique was used for the study. Grove *et al.* (2013) define non-probability sampling as a technique whereby samples are gathered in a process that does not give all the individuals in the population an equal chance of being selected. Purposive sampling was used as the researcher used her judgment to choose subjects who have knowledge on the subject at hand (Polit and Beck, 2014). The sample consisted of 2nd, 3rd ^{and} 4th year students who were exposed to the community-based education programme, having the characteristics in which the researcher considered for the study.

3.5.2. The Sample Size

The sample size refers to the number of elements that are included in the sample. According to Polit and Beck, (2014) the sample size is determined by the depth of information needed to gain insight into the phenomena, explore and describe the concept. The total number of students was 15; students were categorized according to their year levels of 2nd, 3rd, and 4th year which included males and females. Each group comprised of five students each from 2nd to 4th year level. The final sample size was determined by data saturation.

The inclusion criteria of the study

- Students at second, third and fourth year level nursing students who were registered for a Bachelor of Nursing in 2016;

- Students who were exposed to the community-based education programme.

- Students who were willing to participate in the study.

Criteria for exclusion

- All first-year nursing students as they have not been exposed to the -based education programme.

- Those who did not wish to participate in the study were excluded.

3.6. Data Collection Process

Data collection is defined by Grove *et al*. (2013) as a process involving the acquisition of participants and the collection of information relevant to the study. The researcher applied to relevant departments e.g. the Dean of the institution, the head of the nursing department, and the ethics committee before the study could be conducted. The data collection process started immediately after receiving ethical clearance from the University of Kwazulu-Natal Ethics Committee. The researcher requested a meeting with the head of the Nursing Department in order to seek permission and discussed the nature of the study. The researcher also requested to be assisted with obtaining the participants for the study. Three focus group discussions lasting approximately 45 minutes to one hour was held with three different groups of 15 participants. Participants from each of the groups consisted of 2nd, 3rd, and 4th year levels.

3.6.1. Data Collection Method

"Data collection is the process of selecting subjects and gathering data from subjects" (Grove, *et al*., 2013). In qualitative studies the research is solemnly involved in perceiving, reacting, interacting, reflecting, attaching meaning and recording so the researcher may not be limited to a single method of data collection (Grove *et al*., 2013). The researcher used focus group interviews, as the principal source of data collection in the study and conversations were recorded electronically with a voice recorder, with the permission of the participants.

Grove *et al*. (2008) describe focus groups as "groups of four or more people brought together for a particular topic, organized for research purposes where the interviewer guides, monitors and records the discussions." The advantage of focus groups is useful in allowing participants to share their thoughts, experiences and beliefs about the topic at hand (De Vos, Strydom and Fouche *et al.,* 2011). The focus groups consisted of three groups, each consisting of five students from 2nd, 3rd, and 4th year. The venue where interviews were held was free from any distractions, accessible, private and comfortable in order to get participants' attention. The study was conducted at the University of KwaZulu-Natal within the students' classroom, where it was more suitable for the students. The researcher facilitated the group discussion, and led the discussions, which ensured that every member took full part and no one was allowed to dominate. All participants had an equal opportunity and contributed with different opinions. The researcher recorded the proceeds, took observational notes and observed group interaction, which enhanced analysis.

3.7. Data Analysis

It is the range of processes and procedures which are conducted to direct the study, assemble and give meaning to the huge amount of data collected (De Vos *et al.,* 2011). The researcher used

thematic analysis. According to De Vos *et al*. (2011) data analysis in qualitative studies involves rereading of the interviews and field notes and developing themes and highlights found within. In this study the researcher has adapted Tesch's eight steps of coding as suggested by Creswell (2007).

1. Tesch's approach, was followed, the researcher started by gaining a sense of the whole interview by listening to the recordings repeatedly to get the meaning of the context and transcribe it verbatim. Following which the transcripts were read carefully and jotted down on the margin as some ideas come to mind.

2. After completing this task for all fifteen interviews, a list of all the topics were made, similar Topics were clustered together, these topics were formed into columns indicating major and unique leftover topics.

3. The researcher abbreviated topics as codes and wrote the codes next to appropriate segments as new categories and codes emerged.

4. The most descriptive wording of the topics was turned into categories. Topics were grouped into topic lines were drawn between categories to show interrelationships.

5. The researcher made a final decision on the abbreviation for each category and alphabetise the codes.

6. The researcher assembled the data material belonging to each category in one place and performed preliminary analysis.

7. The researcher recorded the existing data where necessary.

The researcher followed the above steps as indicated and identified themes and verbatim quotations which were included in the findings. All three transcripts were analysed individually from 2nd to 4rd year level of students and later condensed into one document.

3.8. Academic Rigour

Lincoln and Guba (in De Vos *et al*. 2011) describe trustworthiness as "an alternative construct for validity and reliability in qualitative research". The first four important criteria for trustworthiness that will be observed include credibility, transferability, dependability and conformability.

3.8.1. Credibility

By credibility the researcher has fairly and faithfully shown a range of different realities to demonstrate that during conduction of the inquiry the subject has been accurately identified and described (Botma *et al*., 2010; De Vos *et al*., 2011). In this study, credibility was maintained throughout. Selection of a suitable population for the study was done. Purposive sampling was used as the researcher selected individuals who were believed to possess specific characteristics relating to the study (Botma *et al*., 2010) Bracketing was used, as the researcher set aside preconceived ideas, thoughts, judgments and beliefs, and allowed consideration for every available perspective (Brink ,Van der Walt and Van Rensburg, 2012). Member checking of findings was used by verification and interpretation of data by the participants (Lincoln and Guba, 2009). Triangulation of data means collection of data from multiple sources for the same study (Grove *et al.*, 2009). For the purpose of this study, data was collected using the focus groups, and interviews.

3.8.2. Transferability

Transferability refers to generalization of findings to other populations, settings and treatment arrangements (De Vos *et al.,* 2011). Transferability was achieved thorough description of context and participants using portions of data that was reported and some comments from the participants. The researcher had several meetings with the Supervisor, who is also an expert in qualitative data analysis, to agree on the categories and subcategories emerging from the findings.

3.8.3. Dependability

Dependability refers to the attempts the research takes to account for the changes in the phenomenon chosen, including changes in the design caused by the new understanding of the setting (De Vos *et al*., 2011). The researcher used a sample framework which was based on its ability to use the participants who are exposed to community-based education programme, which consisted of 2nd, 3rd and 4th year level of students, in order to get multiple sources on the phenomenon of a community-based transformative programme.

3.8.4 Conformability

Conformability refers to the ability of the findings to be confirmed by two or more independent people for data accuracy, relevancy and meaning (Polit and Beck 2014). It indicates that the interpretation of data is not developed from the researchers own will but represents information provided by the participants. The researcher used field notes, which were collected from the participants using a tape recorder. Later, the data was transcribed verbatim, this was done in order to identify deviations from the responses given by the participants. The researcher went back to the participants to confirm whether the presentation of the data is according to what they intended or what they meant. The researcher invited an educator, who is an expert on community-based

education, to read the transcripts with the aim of checking if individual interpretations are similar to that of the researcher.

3.9. Ethical Consideration

Ethics is doing what is right and good during the research process. According to Saunders, Lewis and Thornhill (2012) for the researcher to maintain a high standard of research, the conduct of nursing research requires expertise, diligence, honesty and integrity. The following aspects on ethical principles were observed by the researcher throughout the research process.

3.9.1. Permission

The researcher requested permission from the institution where data was collected, in order to gain access to the participants. Prior to conducting the study, the research proposal was submitted to the research ethics committee from the University of KwaZulu-Natal for approval. Permission was sought from the Dean of the institution, as well as from the head of the Nursing Department. The participants were given a letter informing them about the purpose and the nature of the study.

3.9.2. Informed consent

According to Berg (2004) informed consent is defined as the knowledge that an individual should have before deciding to voluntarily participate in a study without any form of coercion or manipulation. The researcher addressed students through the Head of the Health Nursing Department and explained the purpose of the study as well as the data collection process. The researcher obtained informed consent from the participants by ensuring that they had understood what was required of them and that it is voluntary to participate and that they had the right to withdraw from the study should they wish to do so. Participants were given a written consent form

to sign as an acknowledgement that they understood and agreed to participate in the study. Explanation was given that they would not receive any monetary benefits for participating in the study.

3.9.3. Confidentiality and Anonymity

Confidentiality is related to the researcher's management of private information shared by the participants that must not be shared with others without authorization by the participants (Grove *et al*., 2001) Participants were assured that no other person, except those who were actively involved with the data analysis would have access to the data. Information was given to participants that their names would not be written on the answer sheet but codes would be used to protect their identity. The researcher requested permission from the participants to record the interview and clarified the documents and instruments which were used to collect data. These records were kept under lock and key (De Vos *et al*., 2011). Upon completion documents and recorded data were erased.

3.9.4. Right to protection from harm

The right to protection from discomfort and harm is based on the ethical principle of beneficence which holds that one should do good and above all no harm. All participants were assured of freedom of any harm which may have emanated from physical, emotional and psychological, or legal aspects as a result of their participation in the study (Sauder's *et al.,* 2012).

3.10. Data Management

The audiotapes and the transcribed data has been stored under lock and key in the supervisor's office. The computer used to store the data has a password known only by the researcher and the

supervisor. The data will be stored for the period of five years before being discarded by shredding for the hard copies, and erasing for the hard drive and the audio recordings. A copy of the research study will be submitted to the University depending on the policy of the institution.

3.11. Dissemination of Findings

The findings on the final results was presented to the Dean of the Nursing School and School of Public Health in the form of a hard copy. Two copies were sent to the University of KwaZulu-Natal library for public use. The results will be presented through a conference and publication to reach a larger audience. The researcher wrote individual letters to give results to the participants.

3.12. Conclusion

A qualitative approach guided the naturalistic interpretive paradigm and the research design was descriptive and exploratory. The study was conducted in a naturalistic setting which was appropriate and comfortable for the fifteen undergraduate nursing students. Non-Probability purposive sampling was used to select the participants, and focus group interviews were conducted. Ethical principles were observed and measures were taken to ensure dependability, conformability, transferability and credibility. The following chapter presents how the results were obtained and analysed.

CHAPTER 4

ANALYSIS OF THE FINDINGS

4.1 Introduction

This chapter discusses the analysis of data and presents the findings of the study. The results presented in this chapter emanated from the data obtained through focus group interviews, observations and selected documents. The categories, subcategories and codes used to summarize the findings emerged from the words and phrases presented by the participants and from reading literature around the area of study, as stated in Strauss and Corbin (1990; 2008). The purpose of the study is to explore undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal. The research objectives are to (a) describe nursing students' perception of the concept 'change agent' in the community-based transformative programme, (b) describe the learning process that facilitates students to develop as change agents in a community-based transformative programme, and (c) describe the conditions that facilitate the development of students as change agents in a community-based transformative programme.

4.2 Sample Realisation

Participants in this inquiry include 15 undergraduate nursing students. They were selected from second, third and fourth year levels in the programme, with five participants drawn from each level. The sample comprises of eight females, and six male participants. See Table 4.1 illustrating the demographics of the participants in this study. The participants had exposure to community-based and community-oriented modules, which include Fundamental Nursing Science and Health Promotion at second year, General Nursing Science at third year and Community Psychiatry, Primary Care, Community-oriented Midwifery at fourth year. The teaching approaches used

include case-based approaches, community-based and community-oriented approaches. A community-oriented approach was reported in general nursing, fundamental nursing and midwifery where community-based exposure was less than 50 per cent, thus making it community-oriented instead of community-based learning (WHO cited in Uys and Gwele, 2005).(Refer to Table no 1 below).

Table 1: Participants Demographics/and related Exposure to Learning Approaches

Focus Group	Participant No	Gender	Year of Study	Exposure to modules with community-related content	Teaching approach used	Clinical Exposure
1	P1	Female	2nd	Health Promotion & FNS (at first year)	Community-based and Case-based (paper-based)	Crèches, family, old age homes, hospitals, occupational health, schools
	P2	Male				
	P3	Male				
	P4	Male				
	P5	Male				
2	P1	Female	3rd	General Nursing Science, Health Promotion & FNS	Problem-based & Presentation of real cases	Communities, Groups, PHC Clinics, Crèches, family, old age homes, hospitals, Outpatient departments
	P2	Female				
	P3	Female				
	P4	Female				
	P5	Female				
3	P1	Female	4th	Community-based mental health, Primary Care, Community-oriented midwifery FNS, Health Promotion, General Nursing Science	Problem-based, Case-based (paper & real cases) Community-based	Community, Groups, PHC Clinic, General Wards and Specialised units, Psychiatry/Mental Health, Midwifery Units, Comprehensive Health Clinics, Phelophepa Train, Crèches, family, old age homes, hospitals, Outpatient departments
	P2	Male				
	P3	Female				
	P4	Male				
	P5	Male				

A community-based approach was reported at second-year level in the Health Promotion module and at fourth year in community-based mental health, where experiential learning is dominated by working with communities, groups, families and individuals within families, schools, and exposure to occupational health settings. The participants were exposed to a range of learning settings; the traditional and non-traditional clinical learning settings which included, including communities, groups, families and individuals in communities, PHC clinics, general and specialized units in hospitals, psychiatry/mental health facilities, midwifery units, comprehensive health clinics, Phelophepha train (PHC setting with multidisciplinary teams), crèches, old age homes and outpatient departments.

4.3 Presentation of the Findings

The categories that emerged from the data comprise of a number of subcategories, which were also generated from a collection of codes that shared a similar idea or viewpoint. The categories that emerged are in line with the research objectives in this study. They include; (a) conceptualisation of the phenomenon of students as a change agent, (b) the process of developing students as change agents, and (c) the consequences of developing students as change agents.

4.3.1. Conceptualisation of the phenomenon - students as change agents

This core category was generated from four subcategories which include; (a) change agents as problem solvers, (b) advocacy role (advocate for the vulnerable; health advocate), (c) change agent as action-oriented researcher, (d) empowering role. Each of these subcategories was formed from a collective of concepts and codes. The students as change agents were defined in line with what they do, their engagements and activities in communities. (Refer to Table no 2 below)

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Table 2: Categories, subcategories and concepts

Category	Sub-categories	Concepts/Codes
Conceptualization of the phenomenon student as a change agent	Problem solver	Follows problem-solving process steps and innovative ,Ability to listen to Problems of those in need
		Accessible to those with problems
		Interested in problems of others
	Action-oriented researcher	Conduct focused health needs assessment
		(community, groups, individuals, family and
		epidemiological surveys)
		Formulate community/client oriented diagnoses,
		Prioritization
		Needs-based intervention planning
		Needs informed intervention implementation
		Intervention evaluation
		Collaborative approach to interventions
		Community involvement
	Advocacy role	
	Advocate for the vulnerable	Talk on behalf of the vulnerable groups, children, women, elderly, mentally ill
		Raises consciousness to social ills impacting on health
		Resource person to those in need
		Conducting campaigns in the communities
	Health advocator	Sold out to spreading health information
		Give advice on health ,Teach about Health
	Empowering role	Community/groups/ individual empowerment self-determination
		Consciousness raising
		Skills development

Change agents as problem solvers

It emerged from the data sources that change agents are viewed as problem solvers. They are passionate about helping others in solving their problems. Furthermore, they present themselves as accessible people who can assist others who are in need. They are innovators and in using their knowledge they have to generate new ideas and solve problems. Problem solvers are interested in identifying people issues and ultimately show a willingness to help them. Regardless of the situation, they are capable of strategizing and finding solutions to the problem. This is explained by the following statements from the participants:

One participant views problem solvers as:

People who are interested in getting to know the cause of problems facing the people, and wanting to solve their problems. For example, as students when working with groups or individuals with problems in the community, we were taught that we need to listen well to the problem that is being presented, do a detailed problem analysis so as to come up with appropriate solutions. The solutions provided should bring about positive change and we should be innovative and creative because of limited resources. That is our role as agents of change (P13).

Another participant stated:

Problem solvers are planners who went all out and figure out a plan for students to utilize available resources to conduct interventions in the community. The process of our learning in communities is geared towards problem solving and it teaches us the process to follow when addressing problems in communities (P3).

Action-oriented Researchers

The change agent as an action-oriented researcher emerged as another subcategory because they conduct research that is action-oriented. They do not just conduct research, but they design intervention based on the collected data. The participants indicated that they conduct health needs assessments, including community and epidemiological surveys and use the generated information to arrive at a community or client-oriented diagnosis and to plan and implement an appropriate intervention. They also evaluate the implemented interventions for effectiveness because bringing change is key. The data sources also revealed that they do not work in isolation as change agents but work collaboratively as a team and they involve communities and clients throughout the process, as expected in action research.

> *Looking at how our learning in communities is structured, as students who are expected to act as change agents…. the research we do in the communities is used to come up with the right community diagnosis and interventions. Working with communities and other people, such as may be police, teachers in schools, community health workers, we plan, implement and evaluate our projects that are needs oriented (P7).*

> *When placed in communities we conduct surveys and epidemiological studies with the help of the community, and during the Easter vacation we go back to validate the problems identified and prioritize them so as to come up with intervention projects that will make a difference. The kind of research we do has to translate into a project that will bring change. I think that is why I see myself as a change agent (P15).*

> *The psychiatric module made me realize that we are really change agents. Our community-based projects, which are informed by the rapid assessment we do [at the] beginning of the semester*

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allows us to apply our research skills as well as our project management skills and we adopt

collaborative and community involvement principles. There is this strong element of research in

the role of a change agent. This is my view (P12).

Advocacy Role

The change agents were also defined in line with the role they play, the advocacy role. The

advocacy role of the change agent has two dimensions, advocating for the vulnerable groups and

advocating for health, as unpacked below.

Advocate for the Vulnerable

The participants perceived change agents as a person who advocates for patients or groups of

people with particular health needs, including the poor and marginalised members of society, such

as women, children, elderly and mentally ill people. Data sources revealed that through their

interventions, the change agents contribute by addressing some social injustices that impact on the

health of individuals, groups and communities. The students act as change agents through the

process of working with the communities and involving the communities in planning and

implementing intervention projects. The consciousness of community members is raised on some

of the social issues that affect their health as well as the available resources in their community,

which are under-utilised that may be of value to their lives. As part of the advocacy role the change

agents run campaigns that make communities aware of the needs and rights of vulnerable groups.

> *In my opinion change agents are advocates for the rights of those who cannot talk for themselves.*
>
> *I am referring to the children, women, elderly and mentally ill people. The change agents play an*
>
> *important role in offering help to the needy people. Like us, as we work with communities and*
>
> *families we identify cases related to vulnerable groups and assist in solving them, and we even*

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have campaigns to make people aware of these issues and to the rights of these vulnerable groups

(P9).

In the community where we are based, they just come to us for any information they need because

they see that as what is expected from us, as people who are there [and] who know more about

health. Change agents are people who are resourceful…. (P7).

Change Agents as Health Advocates

The change agents were also described as people who are committed to standing for the promotion

health wherever they are. They are committed to spreading information on health, without

expecting anything in return because they believe in healthy living and lifestyles. They give advice

and teach on health-related matters and social issues that influence the health of individuals, groups

and communities. This is what they had to say:

I view these people as sold out to health and healthy lifestyles. Their interest is sharing information

with people about how to improve their health. We learn this from our facilitators who, when we

are with them in the community, their conversations with community members are about health

and how to keep healthy (P3).

Our lecturer used to tell us that the purpose of placing us in the communities is to influence change

in the health status of those in the community, even if it's a drop in the ocean that will make a

difference. We do not need to be paid for this because it has to be our mission as nurses in a PHC

oriented health system. So, the opportunity we get as health advocates should be about health and

healthy lifestyles (P8).

Empowerment Role

Change agents were also viewed as those people who equip or enable communities with skills and knowledge that increases their ability to take control of their health and lives. The change agents work with an existing structure in the community to ensure greater participation by community members in addressing issues in the community. One group cited a community forum in one of the communities where they were placed; a structure managed by community leaders with a range of key players from the community. This structure facilitated greater participation of the different key players in the community on issues affecting that community. The students were invited to be a part of this structure. Influencing change for the better in the community is key to this structure. With students as part of this structure, a number of community developments and empowerment initiatives were implemented demonstrating what is expected to serve as a change agent in the community.

> *...So, change agents are those people who empower communities, through information sharing or skills development, for them to be able to rely on themselves once outside help is no longer available (P13).*

> *We have community interventions during the winter vacation which are about community empowerment. We come up with a number of empowerment projects and we have to produce an evaluation report that will reflect changes as a result of our projects (P2).*

Data revealed that the students as change agents, participated in empowering communities about existing services in their communities, which they may access to improve their health and their lives, services such as PHC clinics, which are free to pregnant women, children and other

vulnerable groups. In addition, it emerged that change agents facilitate skills development in the communities they work with, or they identify opportunities for skills development in line with the needs that emerge from the community profile. One of the examples cited by the participants was that of empowering unemployed women with gardening business management skills, identifying resources within the communities that they may tap into and connecting them with those resources. In one such project a shop owner donated seeds and watering cans, a local small-business woman ran a workshop on how to start a small business and manage your finances in order to grow your project. This project showed that change agents may work with others to ensure empowerment of the communities. This is what they have to say:

> *As agents of change, we are expected to be knowledgeable of the existing resources in the communities where we are based, and we are expected to make communities aware of these services (P1).*

> *In one of our communities (an informal settlement) when we were doing family studies, we noted that some children were behind with the immunization and the mothers indicated that they did not have money to pay for immunizations. Our group decided to have an awareness campaign on the freely available services and resources in that community because that is what is expected from the change agents (P3).*

In summary the participants in this study conceptualized a change agent as a problem solver, action-oriented researchers, health advocates and advocates for the vulnerable with an empowerment role.

4.3.2 Process of Developing Students as Change Agents

This core category was generated from categories that emerged from the subcategories listed as follows: a) a curriculum that is progressive in nature, b) a hidden curriculum component, and c) the nature of the educational environment. (Refer to Table no 3 below).

Table 3: Categories, Subcategories, Concepts and Sub -concepts

Categories	Subcategories	Concepts	Sub- concepts
Curriculum that is progressive in nature	Paradigm shift from a traditional to an innovative curriculum	Community-based curriculum	Prolonged exposure to community learning experiences, using a range of community-based learning sites
		Problem-based learning	Problem/issues-focused learning
		Competency-oriented approach	Change agent, health advocate, health promoter, leadership, collaborator
		Student-centeredness/driven learning	Active learners, student driven, teacher facilitator of learning
	Relevance and responsiveness (to the needs of the PHC oriented health service system)	PHC guiding philosophy	Strong health promotion focus (health advocacy)
			Targeting under-resourced community to open access to health care (universal health coverage)
		Experiential learning in settings resembling real work settings	PHC clinics, public hospitals, families, groups, communities, crèches, schools (*characterized by being in under-resourced areas*), and private hospitals
		Practice real work skills	
Preparing students for a CBE/PBL programme	Focused capacity building activities for the students	Intensive orientation to CBE/PBL approach	One-week long orientation to the CBE/PBL approach, community-based learning activities and working with communities (community involvement and participation)

		Skills development for working and leading small teams	Retreat – one weekend away to prepare the students for working in teams and leadership role
			Learning and practicing in a simulated environment before real community settings.
		Spending time in a simulated clinical skills laboratory	
Hidden curriculum component	Service learning aligned with curricula outcomes	Learning through providing service	Learn while providing service to individuals, families, groups, communities, health and sick people
		Taking an active role is social and environmental issues/concerns	Implementing a range of community interventions focusing on all social issues influencing the health of clients
	Learning from non-curricula aspects of educational experience	Prepare students for citizenship roles (moral and civic values)	The attitude of how I can contribute in addressing the existing problems/issues in our society
			Not everything is about money; humanity comes first
		Acquisition of transferable skills	Cultural sensitivity, community involvement, communication skills, problem-solving, research skills, health advocacy skills, etc.
Nature of the educational environment	Democratic school environment embracing social accountability values	Democratic learning environment/ school climate	
		School with a social responsibility culture (WHO Collaborating Centre)	Information sharing with communities, students sharing views with each other, professionalism, displaying professional conduct
		Role modelling culture by academics	
		Community engagement supportive culture	

The Curriculum that is Progressive in Nature

The curriculum that is progressive in nature emerged as the main category with a number of subcategories. The subcategories include: a) a paradigm shift from a traditional to an innovative curriculum, and b) a curriculum that is relevant and responsive to the needs of the PHC oriented health service system.

Paradigm shift from a traditional to an innovative curriculum

Data sources revealed that a paradigm shift to an innovative curriculum facilitated the development of students as change agents. This subcategory comprises of a number of concepts which include: a) a community-based curriculum, b) problem-based learning, c) competency oriented approach, and d) student-centred or driven learning.

Community-based curriculum. The participants indicated that there has been a paradigm shift to community-based education allowing students to be fully immersed in the communities, learning how people live in those communities, their day to day struggles that influence their health. This exposure takes place before they are placed in a hospital. This allowed the students to better understand their patients in hospital because they have lived the experiences of working in the communities where the patients come from.

> *Our programme is slightly different to the old one where students were allocated to hospitals most of the time. We spend more time in real communities from first-year to the fourth-year mental health module, learning and implementing some projects aimed at changing [the] health status of the community. The community-based experience changes our perspective on how we view to and manage patients .... (P13).*

...We were also at ... community where there are a lot of people who are homeless, so we understand how they live and that made us understand our patients better when they are hospitalized. In fact, it was more than understanding we really felt for them because the circumstances in their communities add to the health issues they go through (P6).

...In one community one group of homeless people we interviewed told us that in June it's very cold and if they want to bath ... its either they go to the sea and bath or buy water. Sea water is salty and not good for the skin and they cannot afford to buy water because they do not even have food to eat. ... So that is why they are so dirty like every day. And when they get admitted in hospital instead of judging them we see them differently because we know their background (P10).

Data sources also revealed that the students in a community-based curriculum are exposed to a range of learning experiences which are spread from first year to the fourth. When placed in communities they are placed for longer periods of up to four works. That prolonged exposure facilitates the development of skills expected from the change agents.

During our community in second year we were allocated for four weeks in January, a week in April, 3-4 weeks during the July vacation and one week in September. We spend more time in the community learning about healthy people before they are hospitalized, coming up with intervention strategies required to address issues in communities (P4).

For a change we didn't have to go to the hospital, we just have to go out to the community just to interact with the people and this gave us an opportunity to see patients before they are being admitted to the hospital and to understand their problems. We also interacted with the people and learn about families and individual people problems focusing on their physical, social, and psychological aspects and how they live, which is what is expected of us as change agents (P13).

It emerged that problem-based learning was used in the community-based curriculum. Problem-based learning emerged as key to facilitate the development of required skills from students as change agents. According to data sources central to community-based learning is the identification of health-related problems and issues and following a problem-solving process in analysing existing problems, and developing and implementing intervention plans. In addition, immersing students in communities for a longer duration enabled them to have a deeper understanding of the problems of the patients before they are admitted to the hospital, as change agents are expected to understand their clients in context to provide individualised care. Through this process students discuss the problem as a group, learn problem solving skills and gain knowledge that assists them to come out with solutions that will allow them to solve complex and real problems confronted by communities.

In addition, the exposure to community-based learning experiences working with communities was reported from first year to fourth year and this played an important role in developing their ability to influence change, as they engaged in all the steps of the community development process. The participants reported a range of learning activities in communities that start with identifying a problem, generating a diagnosis, developing, implementing and evaluating an intervention plan.

These learning experiences included conducting a study of a family that has a child that is under five years, conducting an epidemiological study and a community assessment to serve as the basis for the community intervention, and evaluating the impact of the implemented intervention. These learning experiences were important in better understanding the role of a change agent.

We spend more time in real communities from first-year to the fourth-year mental health module, learning and implementing some projects aimed at changing [the] health status of the community (P13).

We…did [a] family study we look into their social life and we focused on the under-five's nutrition and formulated a diet plan and advise families on the correct diet. We also encouraged families to bring their children for immunization. We gave immunization at the clinics (P1).

We *gave health education about HIV and AIDS … by promoting condom use and prevention of drug abuse, since it was one of the issues we identified in the community and we developed role plays on [the] promotion of hygiene for the homeless people, we gave them [a] toothbrush, toothpaste, soap and facecloth. We also taught them about environmental health and gave them [a] dustbin for waste collection. We led by example, we showed them that they can also clean their toilets and we painted the clinic and changed the environment for [the] better. We also gave school children hampers with sanitary towels (P6).*

Data also revealed that the nature of communities selected is important in developing the required characteristics of a change agent. The participants reported that they were placed in different types of under-resourced communities, which included urban, suburban, rural communities and informal settlements. This allowed the students to understand their patients or clients' context and provide

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appropriate care. The students learned about the social determinants of health in the communities and that allowed them to see each patient as an individual and not judge them if they are different.

Working in communities brings you down, it humbles you, it uh, I don't know how to put it, but it takes you to the ground, you meet people, you interact with the people and understand people's lives (P6).

We were told that there were informal settlements so when we were there we were exposed to people in the rural areas with poor living conditions and facing challenges, like poverty, crime, and homelessness on [a] daily basis (P15).

We were also allocated in urban areas, where people have beautiful houses, we also taught them about healthy lifestyles, for example good nutrition to prevent diseases like hypertension and diabetes mellitus (P11).

The data sources also revealed central to the community-based curriculum used, are the students. The curriculum is student-centred, with students playing an active role in the learning process and the lecturer serving as a facilitator instead of adapting a teacher directed approach. The participants shared their views that facilitators guided them and understood the content very well and gave the students an opportunity to take the lead in their own learning, allowing them to be equipped in the skills required in the health profession. Participants noted that the role of the learner has shifted from being a passive receiver of knowledge to taking full control of directing their own learning, without being led by others. According to data source students constructed their own knowledge

through meaningful experiences focusing on specific topics that they have identified from the community. Some participants stated that:

As change agents we directed our own learning, we moved from being led by the facilitators and we stand on our own. Facilitators had confidence in us, they left us to be on our own (P4).

We went to the community and conducted assessments to families and identified problems without being assisted by the facilitators, this has led us to develop [an] interest in what we were doing (P9).

Our facilitators were good and informative, they guided us in identifying the problems in the community, but they did not spoon feed us with information, we were on our on as a group. Through sharing with each other we managed to get the information that was required of us, this is what made us to be real change agents (P5).

Participants indicated that self-directed learning is a strategy that was used during community-based education as a basis for experiential learning. It also emerged that self-directed learning facilitated the development of the following skills: leadership, presentation, communication, writing, negotiator and self-confidence. When working with communities these skills are required for adult learners as well as change agents while providing a service to the community. This is what other participants had to say:

The university applied self-directed learning to prepare us as one of their strategies used in community-based learning (P13).

We learned on our own how to write letters to the sponsors, we managed to gather information on the Internet and indicated all what we needed so that we can be assisted to do interventions for the community (P3).

One participant mentioned the skills she learned while working with patients in the communities. This is what she said:

As a change agent, ... I have learned how to interact with the people while gathering data in the community, my critical thinking skills and decision making skills were improved while solving individual problems in the community, for example I collected data from a female patient who was repeatedly and verbally bullied by his partner at home, I used my skill to make a diagnosis, refer the patient to the social worker and the patient was immediately given care for her problems (P6).

Relevance and Responsiveness (to the needs of the PHC oriented health service system)

Data sources indicate the basics of the Primary Health Care as embedded in the (PHC) philosophy, and its goal is to reach health for all. It came out from the data that during placement of students in the clinical setting the principles of social justice, fairness, community participation, accessibility and affordable technology, health education focused on improving the causes of ill-health and providing services that address the needs of the population as stated in WHO (2003). Participants provided services to the community by reaching out doing home visit to individual families and communities thus making it available to the underprivileged. These are the sentiments shared from the participants:

As change agents we were motivated to learn in a community environment and we were afforded the opportunity to give service to the poor and also to visit people at their homes, making it

available at no cost which is one of the goals of primary health care, to provide health to all people

(P6).

We provided services through community participation by gathering information to the people who are in need of services, identify their problems. We used technological devices such as Baumanometer to confirm the data presented by patients and come up with individual, and community diagnoses, give health education in order to improve health as stated in [the] Primary Health Care policy (P5).

We provided services to people who didn't have access to clinical facilities, we conducted home visits, and participated in family study and we were exposed to see the actual living conditions of our patients in the community (P3).

Participants mentioned that whilst allocated in the PHC environment they connected and interacted with the communities in order to understand their way of life, to construct and give meaning to their health problems. Data collected was mainly used to understand the nature of the problems experienced by the communities so that proper interventions can be implemented. The participants also highlighted that the community-learning site provided professional socialisation which will consequently influence their career choice to work in rural areas. Participants appreciated that they visited rural areas where services were not available, they reached out to communities by widening accesses to the disadvantaged people. These are some of the responses from the participants:

According to my view during community placements we get to see the different standard of leaving of our people and the different condition of [their] environment and so we get to be exposed to different situations (P11).

I found it to be very important for me to work in the community where I did my training, the reason is that I understand their problems as well as and their way of living (P5).

Participants mentioned that they visited various community sources used as learning sites. The police station was used a source to obtain information on social problems affecting the communities, such as the prevalence of crime in the communities, as well as how community members should protect themselves against criminals. Participants mentioned that schools are utilized as a learning site, where students interact with pupils, teachers and parents to identify problems and advise them accordingly. It was clear from participants that they were exposed to school environments and taught school children on health promotion topics which are personal hygiene, oral hygiene and sex education and participated on the campaign of offering pupils hampers to assist them on maintaining hygiene. Community health care centers came out as a learning site to provide primary health care services aimed at promoting health, preventing illness and curing diseases. Participants indicated that they were exposed to these services so that they can render service to communities. This is what they had to say:

We went to the police station and we witnessed how criminal activity are happening, their effects on the community and were also taught community how they need protect themselves, and we learned about different statistics of crime rate in the community (P4).

We visited schools and taught school children about personal hygiene and we had an opportunity to offer girls sanitary pads as our expression of giving to the school child. We also visited several schools during our community visit and taught them about oral hygiene and gave them toothbrush and toothpaste (P3).

We visited community centres to work with the community members, parents so that we can plan and identify problems and teach our communities (P4).

Preparation of Students for Community and Problem-Based Learning

One sub-category emerged under this category, focused capacity building activities for the students. According to data sources, focused capacity building activities included a week-long orientation preparing students for learning in community-based settings, community involvement and partnerships, and a weekend retreat away from campus to build the capacity of the students to function and lead teams as well as spending time in the simulated clinical skills laboratory to learn some basic skills required when working in community-based settings. The skills such as how to prepare relevant health education messages, health education strategies and how to prepare messages for different groups. This is what they said:

Our facilitators prepared a team building where we learned to work as a group as well as an orientation block for a week and informed us on what is expected of us and also about the communities and what we would find, [during] our placement. We were shown different profiles from other students so that we understand what is expected of us [when] we gather information about the communities. (P7)

As a group leader…. I learnt how to lead and direct a group (P2).

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We were also allocated at the skills lab where we learned about the skills that we needed to apply in the community, for example preparation of a health education lessons and how to do presentations to the audience, like whenever you go to the clinic you learn some skills that we didn't know (P4).

Hidden Curriculum

From the category hidden curriculum, i) service learning aligns with curricular outcomes, and ii) learning from non-curricular aspects of educational experience, derived as subcategories.

Service Learning Aligns with Curricular Outcomes

Data sources revealed that graduate competencies emerged as a response from a competency based curriculum which allowed students to incorporate knowledge, skills and values demonstrated by students when they performed their tasks. These competencies emerged as essential outcomes in preparing graduates who will provide services that will respond to the needs and priorities of the health systems. According to the participants, graduates performed assessments comprehensively focusing on the needs of the individuals, families and community using appropriate technology in order to come up with relevant diagnoses. Additionally, documentation on assessments and recommendations were carried out on the identified problems. Participants mentioned that they provided a teaching, supervision and management function as one of the independent functions of a practitioner. These are some of the extracts from the participants:

We conducted assessments of individuals, as well as using our knowledge gained in class so as to [come] up with a diagnosis and plan for interventions. This is how they prepared us during our training so that our skills become important in meeting the needs of our communities (P7).

While doing family study we conduct assessments, identify problems, and give recommendations on the problems identified. We support families who are in need, and we further record all necessary interventions that we have identified. These are some of the competencies we need to achieve at the end of our training (P12).

During our exposure to the clinic we participated in doing supervision to the students at the clinic, we were given a delegation book to write tasks which are to be performed by the staff the next day. We learned about ward administration. We also taught second year students how to give health education (P13).

Data sources revealed that health promotion and illness prevention formed part of the strategies used on the curriculum content, as outlined in the Ottawa Charter for Health Promotion (1986). Participants mentioned that they were supervised by facilitators to implement the curriculum while they were allocated in the Primary Health Care settings, doing home visits to families and individuals on the following content, child health, focusing on the following strategies growth monitoring, breastfeeding, immunization, female education, first aid and family planning (GOBIFFF). Participants gave health education on communicable and non- communicable diseases, they gave advice on prevention of chronic conditions, nutritional problems focusing on the elderly people and maternal health, environmental health and social problems. Some participants stated that:

We provided health promotion service to the elderly people by giving health education on nutrition and advising them on types of diet and the preparation of food to suit their problems. We also gave them health education on environmental hygiene, taught the people on proper disposal of refuse as well as cleaning of the toilets (P8).

Our topics on health promotion focused on the following topics, child growth monitoring and oral rehydration on cases of diarrhea and vomiting, promotion of breast feeding on women, giving of immunization, how to provide first aid at home in case of an emergency, and female education focusing on personal hygiene as well as family planning. We also taught them on awareness of [the] causes and prevention of chronic diseases such as pulmonary tuberculosis and hypertension (P10).

Learning from Non-curricular Aspects of Educational Experience

Participants mentioned that they were given assignments as a method used to facilitate the development of learners during the learning process. These assignments are given early in the course so that students can understand how assessments will be conducted. The following methods were conducted during the learning process; community profiling, epidemiology study, community interventions and family study. Participants mentioned that they participated in programme evaluation at the end of the learning experience to assist with course improvements. This is explained in the following excerpts:

We were given a workbook with objectives clearly stating what we will be expected to complete at the end of our placements,: a community profile, to do [an] epidemiology study, community study and family study and we also participated in the survey conducted by facilitators by filling in evaluation tools which is provided in the file. We were also orientated on how to use the tools (P14).

We were informed about expectations of the course in term of assignments to be done during our clinical placements. Our workbooks enclosed the tools as well as the dates for submission of the assignments. We are expected to conduct a family study, epidemiology study and community interventions as listed in our workbooks (P11).

Participants highlighted that performance-based assessment was conducted during field activities. This form of assessment was found to be sensitive to the objectives of community-based education in producing health professionals who will be responsive to the needs of the community. It also came out that the community was part of the assessment of students, this gave them an opportunity to give feedback on the service provided by students and integration of nursing values on the profession. Facilitators were reported to be well informed with the assessments of students in a community-based environment. The nature of the assessments was mainly problem solving oriented, conducted during the learning experience. Additionally authentic assessments were conducted during the implementation of interventions or needs-based interventions. This is mentioned in the following quotes:

We conducted interventions on the communities, they benefited from us by receiving the service from the students and we benefitted from the community as they gave feedback after the learning experience, and we reflected on what we have learned from them (P8).

The types of assessment were mostly problem solving as we identified real problems of individuals, families and [the] community, the came [up] with a diagnosis and conducted interventions on the identified problems. Facilitators [who] directed us were knowledgeable with community-based education and gave us full support during our preparation for interventions (P2).

Educational Environment

From the category of educational environment the following subcategory emerged: (i) Democratic school embracing social accountability values emerged.

Democratic School Embracing Social Accountability Values

Participants gave their views that through collaboration with communities and among each other they were given an opportunity to share their experiences. This was observed in increased communication between the learners, facilitators and other members of the multidisciplinary team while planning for interventions. One participant expressed her views that working together with senior students who were knowledgeable, afforded her an opportunity to learn from others and reflect on that. Participants further mentioned that an advantage of holding subsequent meetings with the facilitators gave them the opportunity to solve real problems of the community thus enhancing their critical thinking and academic skills. These extracts are from the participants:

> *Through information sharing with the communities and facilitators it has been very helpful in developing our reasoning skills (P6).*

> *Working with the colleagues ahead of us assisted us about their experience, they will tell us what to do and not to do, and they tell us how we should approach other people* (P10).

Wearing of uniform was mentioned as an image displaying professionalism among the students and they mentioned that they identified themselves as caring for the communities. Participants emphasized the fact that professional values should enhance the good interpersonal relationship between change agents and the community. Participants mentioned commitment and dedication as

their strong motivation, and some characteristics which were found to be essential in developing trust while students provide service to the community are listed as: respect, which incorporates empathy, provision of information, understanding individuals as they are and paying attention to their needs. These will improve good interpersonal relationships between patients and the students. This is stated in the following extracts:

We were wearing our uniform with the name tag so that people can see that we are nursing students, different from other professions who care for the needy and that they should not confuse us with other people (P7).

It is important to keep confidential matters of the patients so that people you are offering a service [to], they put trust on you. Nurses are to respect patients, this will build trust, which will lead to building nurse-patient relationship creating a good environment for sharing of ideas (P5).

We are proud to do our job as change agent nurses, but we are observing there are a lot of challenges in this profession which includes commitment and dedication. Change agents are to empathise with the patients as they present their problems, showing understanding how the people feel, by not shouting at them (P6).

4.3.3 Conditions that Support the Development of Students as Change Agents

Under the category, conditions that support the development of students as change agents. Four subcategories were further identified: a) aspects related to the facilitator, b) aspects related to the student, c) aspects related to the institution, and d) aspects related to the community. (Refer to Table no 4 below).

Table 4: Categories, sub-categories and codes

Category	Sub-categories	Concepts/Codes
Conditions that support the development of students as change agents	Aspects related to Facilitators	Facilitators accessible in the classroom and clinical site
		Good working environment, with respect, honesty and caring attitude
		Supplying of learning tools, giving feedback
	Aspects related to students	Commitment, motivation, loyal to each other
		Team work, support each other
		Collaborative learning
	Aspects related to the institution	Learning materials, human resources
		Innovative teaching strategies, material, resources
	Aspects related to the community	Service learning, safe learning environment, curriculum content

Aspects Related to Facilitators

The findings revealed that facilitators were actively involved in guiding the students through supervision, both in the classroom and in the clinical sites. An environment which promoted a good relationship between facilitators and students was created. Participants further added that this environment was precipitated by the following attributes; respect, openness, friendliness and support which was observed from the facilitators. Furthermore facilitators provided appropriate learning material such as learning objectives, handouts and study guides which ensured the smooth running of the programme. Participants reported that the facilitators provided their expertise regarding facilitation of the programme, which was observed throughout as well as giving continuous giving feedback to the students.

Our facilitators were always available in the classroom and in the clinical site, and they treated us well. Their warm welcome allowed us to interact very well with them, we would come to them and give feedback after we went for community exposure and they helped us a lot to understand what we're doing in the community. They were really good to us (P3).

Facilitators played a very important part in our learning they guided us to understand what we were learning, they gave us direction on what we were supposed to learn about the content and they provided study material on how we should go about with the content and to identify problems and give intervention in the community (P7).

Aspects Related to Students

Participants reported that there was mutual agreement from each other through dialogue to reach consensus in solving community problems. It further emerged that through collaborative learning change agents found it to be beneficial in utilizing senior students to further understand objectives of the course. This is what they said.

We worked as a team in finding ways to deal with [the] community's problems. Apart From that our senior students were helping us to clarify where we didn't understand (P5).

One participant, who was a leader of the group, mentioned the support she received from a former student. These is what she had to say:

I had a very supportive deputy leader who assisted me with information when I did not understand what was required during our studies (P9).

Participants appreciated the use of various teaching methods, citing that it assisted them to easily convey the health promotion message which was aimed at changing the behaviour of the people. They also mentioned that their assessment skills were strengthened after they went back and gave feedback about the problems they had identified in the community.

We performed a role play during our interventions to teach the pupils at school and we used group discussion when we were teaching the community on health promotion. We also prepared teaching aids, such as dildos, washing towels and soap as well as empty alcohol bottles to show the community what we were talking about (P4).

I was happy to go back to the community and give information on the problems of the communities are to bring change to their lifestyle and to complete the work that we have started (P11).

Motivation and commitment came out as contributory factor that assisted students to strive to pursue their goals, as well as assisting the community to reach better outcomes. One participants said:

I was self-motivated. I have the ambition to go back and [change] the community because I am coming from a disadvantaged community (P8).

Aspects Related to the Institution

Participants mentioned that the institution provided reference materials such as; a skills laboratory to sharpen their skills before they reach out to communities; a library and books so that they can learn about epidemiology, demography, as well as understanding the new innovative teaching strategies that are used in order to be able to apply them in their learning. The use of technology

came out from the participants as beneficial, in that it made it possible for them to search for new information on how to solve problems encountered by communities and how to plan for interventions as evidence-based practice.

I think the college too contributed towards us being practical agents, because it provides us with the skills lab so that we can know how to do some procedures before we can be placed in the community (P1).

The university [provided] us with tablets and the use of Wi-Fi made it possible for us to search information about community-based learning and to understand how to intervene on the problems of the community (P2).

We used the library to search information that was related to the problems of the community and to find solutions on how to deal with non- communicable diseases and to plan for interventions, for example giving health education to a diabetic patient (P6).

Transportation of students from the institution to the community site visit was provided by the institution, however there were challenges reported. Some students reported to have used their pocket money to hire transport to the sites, and some used their own vehicles to reach the community sites. This is highlighted in the following quote:

The university should provide us with transport as we are using our own money to hire transport to go to the clinical site. Some of us are using our personal transport to reach the communities sites.

Aspects related to the community

Data emerged from the participants indicating that service learning benefitted the students to be developed as change agents as they became part of the various NGOs in better understanding the problems of the communities. Communities provided an environment for successful learning by ensuring the safety of the students during community site visits. They also provided resources to be utilized by the students such as a hall, tables and any form of support that was needed. Participants confirmed that the information provided by the community formed part of the curriculum content, as community leaders assisted students in identifying problems encountered and gave suggestions on how services can be conducted, as well as forming part of the assessment during interventions. These are some of the extracts:

> *The community had some organizations that motivated us…. it helps the people in the community who have problems, [which] can be HIV or any other problems. So that also influenced us that in [those] communities, they were also taking care of themselves within the community (P6).*

> *We have been working with the counsellors regarding the collection of data in the community. Also, they supported us with the intervention in such a way that they gave us a hall for free, they didn't charge us they gave us tables for free with everything that we needed. The police were always available for our safety. I think it was going to be difficult if there was no support and there will be no interest (P1).*

4.3.4. Consequences of Preparing Students as Change Agents.

Data further emerged indicating the consequences of preparing students as change agent. The following five subcategories emerged: a) empowered students, (b) Widening access to health care

services (c) Raising consciousness of students on health issues (d) Self-reliant community and (e)

Faculty improvement. (Refer to Table

Table 5: Categories, Subcategories and Concepts.

Categories	Subcategories	Concepts
Consequences of Preparing Students as Change Agents	Empowered students	Collaborating skill, critical thinking skill, leadership skill, agents of change ,Information sharing ,writing skill, communication skill ,Self-directed learning
	Widening Access to healthcare Services	Bringing service to the People, students providing support to the poor people, Apply Batho Principle (Access), Reaching out to the people.
	Raising Consciousness of Students on health Issues Self-reliant Communities	Behavioural change, learned life skills, transformed students and communities. Community making informed decision, People changing from old habits to new, Empowered communities.
	Faculty Improvement	New Innovations, Participated in curricula improvement. Students have inputs on the development of new policies on teaching and learning

Empowered Students

Participants indicated the benefits of being developed as change agents afforded them the

opportunity to be socialised into the profession. It also came out that through transformative

learning students' knowledge is enhanced in correlating theory with practice, thus increasing

knowledge on issues of diversity. This allows them to be sensitive to the cultural and ethical beliefs

of the people. Data source revealed that the programme facilitated and promoted strategies that

stimulated the development of critical thinking skills, leadership, writing and communication skills, which are competencies required for practitioners who work with the communities. Participants further stated that they developed collaborative skills through sharing information and ideas with each other, communities, NGOs and facilitators. Self-directed learning assisted them to be involved in their own learning and take action on issues that directly affected them, which is expected of them as change agents. This is presented as follows.

> *As change agents we learned about the values and the culture of our profession and what is required of us as change agents. We also learned about other people's culture and their religion. It is important to respect people's culture so that the community can accept and respect us (P5).*

> *As change agents we learned as a group and learned to communicate with each other, we also learned to appreciate each other. We were sharing information with each other while we were discussing a topic on drug abuse, this has further assisted us to learn how to present a topic to a group of people. We also shared information with the members of the communities (P6).*

Another participant said:

> *Working with people afforded me the opportunity to think critically, not just to agree on someone's point of view during our discussions, but I respected each other's opinion (P1).*

Widening Access to Healthcare Services

Data revealed that developing students as change agents afforded them the opportunity to learn through providing service to the community, which is the basis of the primary health care approach in providing service to the disadvantaged people. Participants provided service to various

communities and reached out to families and individuals who do not have means to access these services, by visiting them in their homes. This is what a participant said:

> *'Through learning, as change agent we were afforded our lifetime achievement to learn while providing service and to reach out and provide service to the needy people who do not have access to services. We were motivated to help the needy people in their respective homes (P3).*

Raising Consciousness of Students on Health Issues

Consciousness raising emerged as a concept which allows students to bring awareness and motivate others for a need to change their old habits. Participants indicated that they were influenced by experiences which further encouraged them to change their behaviour towards health issues. It came out that topics such as teenage pregnancy brought about awareness, and participants were empowered with certain life skills as they are at the age of discovering their adulthood. One participant said.

> *As a change agent I learned about [the] dangers of teenage pregnancy, HIV and AIDS. This [information] has helped me to be aware of sexually transmitted [disease] information and to take care of myself and also to teach others how to take care of themselves (P11).*

Another participant said:

> *The information that I have learned will help me to teach other people to change from bad behaviour and live [a] healthy lifestyle, for example quitting from smoking (P7).*

Self-reliant Communities

Participants indicated that health education was used as a tool to address social determinants and enabled people to make informed decisions about health-related issues. Data revealed that

community empowerment on health education to individuals, families and groups demonstrated client willingness to comply with health recommendations, addressing the universal right to health and reaching the goal of 'health for all', as suggested by the WHO (2014). It also came out that students educated communities on the maintenance of good sanitation, environmental health and personal hygiene. Pupils at schools were sensitized on various health related issues including HIV and AIDS, drug abuse, teenage Pregnancy, and sexual health. Their contribution towards empowering the community is confirmed in the following statements:

> *As change agents we used health education to teach communities on how to promote and prevent health. We participated in teaching the community about HIV and AIDS and we demonstrated to them on how to use the condom. We encouraged them to dispose [of] thrash in the dustbin, [and] taught [them] to prevent diseases such as pulmonary tuberculosis (P8).*

> *We went to the schools and taught the learners about cleanliness, which includes washing their body with soap and water and using lotion to prevent cracks. We also taught boys and girls about sexually transmitted infections and demonstrated to them how to use a condom and the importance of abstaining (P3).*

Faculty Improvement

Data revealed that through students interacting with peers, facilitators and the community it has led to new ideas to help bring innovations to the faculty. Students became actively involved in influencing laws and policies that direct practice. The transformative learning programme was found to be in line with preparing students who will provide services that are relevant and responsive to the national health policies of South Africa, however input was given by participants on how the delivery of services can be improved. Participants further added that the faculty is

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transformed as they integrated technology in the whole curriculum to assist learners to easily identify problems and make necessary interventions. This gave credit to the entire faculty in ensuring that they produce competent nurses who will meet the diverse needs of the whole population as required by the health profession.

After we visited the communities we came back and gave feedback to the community and the facilitators to make further improvement in our learning, information can be used to improve the faculty (P10).

During our learning experience we were given questionnaires to be used to identify gaps in the course and remedial steps will be taken to correct and improve our practice (P12).

We used technology in our learning, as our module is mainly evidence-based practice. This allowed us to bring input in our practice and to learn about ways to solve them (P7).

4.4 Conclusion

In this chapter, the researcher discussed data obtained from focus group interviews conducted with the nursing students. Students gave their views on understanding the concept change agents in a community-based transformative learning. Findings revealed that students understood the concept change agents to be people who possess the following characteristics: problem solvers, action-oriented researchers, health advocates, as well as having an empowering role.

The summary of the findings revealed that a process of developing students as change agents utilized the curriculum, which is progressive in nature and which displayed a paradigm shift from traditional to innovative. The curriculum comprised of a problem based curriculum, with a

competency based approach and student-centered learning. The community-based education programme was found to be relevant and responsive to the primary health care goals.

The curriculum also exposed students to non-curricular activities which exposed a hidden curriculum. The assessments conducted on students should be authentic and problem oriented, focusing on individual, families and the communities. The role of the teacher is that of mediator of learning and the role of the learner is to take active participation in the learning process. The conditions that facilitated the development of students as change agents emerged as facilitator, student, institution as well as community related. Data further emerged that indicates the consequences of developing students as change agents to have benefits on the empowerment of students developing critical thinking skills, widening access, raising consciousness about health issues to students, producing self-reliant communities and improving the faculty.

The next chapter will be dedicated to a discussion of the findings using current literature, and the recommendations and conclusion of the study.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter presents the discussions, recommendations and conclusion reached in this study. The purpose of conducting the study was to explore the perceptions of students as change agents in a community-based transformative learning programme in Kwazulu-Natal. Of critical importance in this chapter, is a demonstration of how the research findings address the research objectives, and answer the research questions outlined in chapter one. A total number of fifteen (15) nursing students registered for a Bachelor's degree were exposed to a community-based programme, which included 2nd to 4th year level where students, were interviewed.

Focus group discussions were tape recorded and transcribed verbatim as the main source of data in the study. The categories that emerged in response to the research objectives in this study included: (a) Conceptualization of the phenomenon - students as change agents, b) process of developing students as change agents, and c) conditions that facilitate the development of students as change agents. Relevant reference is also made on the reviewed literature cited in chapter two on the interpretation, argument and justification/validation of the findings.

5.2 Discussions of the Findings

5.2.1 Conceptualization of the Phenomenon - Students as Change Agents

According to the findings of the study, five characteristics emerged which best describe students as change agents. These characteristics are listed as: a) problem solvers, b) action-oriented researchers, c) advocacy role, d) health advocate, and e) empowerment role.

Change agents as Problem Solvers

The findings of this study reveal that change agents are viewed as problem solvers who are passionate about solving people's problems and are understood as always available to provide help to those in need. According to literature, Amalba *et al*. (2016), Clark (2015), Nandan *et al.* (2015), and Lippitt *et al*. (1958) concur that change agents are viewed as caring people who are concerned with dealing with the problems faced by communities. Clark (2015) notes that change agents are solution givers in dealing with problems of the communities.

The findings reveal that change agents are viewed as innovators who take initiatives in using their knowledge to generate new ideas to solve people's problems. In line with the above, authors Okello *et al*. (2015) and Godin and Vinck (2017) assert that change agents use their knowledge and skills to develop projects that will make a difference in solving people's problems.

Inherently nursing is a science oriented and developing profession that should cater for the changing needs of the society as well as the social and disease trends, thus innovation is key in the operations of nurse practitioners. As innovators, a systems approach is essential in community-based learning programmes (Crisp and Chen, 2014). The findings further highlighted that change agents are viewed as good strategists in finding solutions while faced with various circumstances in the workplace by finding solutions and solving problems. A strategist is a person who is skilled in making plans for achieving a goal (Webster, 2011). This is consistent with (Onyango-Ouma *et al*., 2005) who point out that change agents are capable of manoeuvring situations they face by finding a way out in order to come up with solutions.

Change Agents as Action-Researchers

From the study it came out that change agents are viewed as action oriented researchers who conduct their research with the people by collecting data, coming up with a diagnosis and implementing interventions on the problems identified. This is in line with Chevalier and Buckles, (2013) who state that action researchers participate in research for the purpose of educating the communities. The results further state that participants conducted health needs assessments, including community and epidemiological surveys and used the generated information to arrive at a community or client-oriented diagnosis, plan and implemented an appropriate intervention to bring the desired change. Okello *et al*. (2015) and Wallerstein and Duran (2010) agree that through action research, health problems of the community members are identified and prioritized, planned interventions implemented and researcher projects conducted, in order to bridge science and practice. Dunne *et al*. (2011) and Kay *et al*. (2010) support the view that change agents are regarded as researchers who are able to design plans that can be used to solve existing and future problems.

The findings state that change agents are viewed as collaborators between communities and practice in addressing social determinants of health. It is stated that they work collaboratively as a team by involving communities and clients throughout the process, as highlighted by Tovar (2015), Ndateba *et al*. (2015), Uys and Gwele (2005), and WHO (1987) who mention that through participatory action, researchers form partnerships between communities in addressing real problems encountered by disadvantaged communities. It is imperative that change agents form partnerships with the communities so that they are supported by community members in

identifying individuals and families that are in need of help as well as providing protection to the students.

Advocacy Role

The findings emphasized that change agents are viewed as people who play an important role in advocating for the vulnerable people who are presenting a particular need. According to Dictionary (2006) "advocate is defined as one that pleads the cause of another or one that supports or promotes the interest of the other", therefore change agents have an obligation to provide service to the vulnerable people. Change agents are to be a mouth-piece on behalf of the disadvantaged people by showing empathy in understanding their challenges and consequently assisting in solving their problems without judging them. This is supported by Espina *et al*. (2016) basically health professionals provide services that safeguard the welfare of the people and protect them from harm. Health professionals are to comply with their code of conduct which guides them in conducting their practice. Peroni and Timmer (2013), and McGee, O'hanlon, Barker, Hickey, Montgomery, Conroy *et al*. (2008) brought to light that women, elderly, mentally ill and children are groups of people who are marginalized and whose rights are violated, hence they are to be protected from any form of exploitation. However ,Mechanic and Tanner (2007) added that vulnerable groups are people who have chronic conditions such as HIV and AIDS, the disabled and those who are homeless.

The findings emphasized that change agents are to consciontized community members into making use of resources that are not utilized by communities. Freire (2016) concurs that raising people's consciousness will bring about awareness to their social, economic and political systems that

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oppress them. This will allow change agents to conduct outreach programmes by sensitizing communities, and honouring their rights to become aware of such services. Interestingly, Katikiro and Njau (2012) confirm the use of outreach youth programmes to have a positive impact on the barriers of using condoms to non-condom users. Change agents are to reach out to all communities with the purpose of bringing the health message to the communities. Surprisingly, barriers such as political unrest could create challenges in providing community programmes to the community (Negarandeh *et al*. 2006).

Change Agents as Health Advocates

The findings of the study reveal that change agents are viewed as people who are committed and dedicated to health promotion, and spreading health information to the society without being rewarded in return because they believe in improving healthy lifestyles. The results of the study further show that change agents use their expertise and influence the people who are in need of health as well as addressing societal issues that affect the health of the individuals, families and communities. This findings highlighted are in response to the WHO (1986) cited in (Ndateba *et al*., 2015) on the Ottawa Charter for health promotion, stating the importance of increasing people's knowledge on causes of ill-health so that they have control over their healthy lifestyles. In the National Summit, SANC (2011) health professionals were urged to advocate for health, thus allowing change agents to be involved in participating in health wellness programmes promoting a good standard of living to communities.

The emphasis on developing change agents on the code of ethics will improve the quality of the service provided to the communities and will improve their ethical decision making skills as well

as increasing knowledge on professional growth, making them better equipped to face the challenges experienced by the health system in the 21st century.

Empowerment Role

The findings of the study reveal that change agents are viewed as people who empower communities with skills and knowledge that increase their ability to take control of their health and lives. Empowering communities will allow people to have choices about their own health. These findings are congruent with O'Cathain *et al*. (2005) and Freire (1972) who suggest that the empowerment health education model used by involving and allowing people to participate in dialogue was found to enhance people's desire to change their lives. However, Wahid *et al*.(2017) note that political interference from the communities has been identified as a barrier to community empowerment as it impedes community participation.

The findings further state that change agents are a part of an existing structure formed by the community members, this structure is reported to facilitate a greater participation of different key players on issues affecting communities, as well as influencing change for the better in the community. Interestingly, students as part of this structure, have implemented a number of community development projects and empowerment initiatives to demonstrate what is expected to serve as a change agent in the community. Okello *et al*. (2015) and Clark (2015) confirm that involving students as part of the structure in empowering communities has advantages of motivating healthcare workers to gain knowledge and benefits students with access to up-to-date knowledge. However, Mbalinda, Plover, Burnham, Kaye, Mwanika, Oria *et al*. (2011) exposes challenges experienced by community leaders on being de-motivated to support students due to

lack of compensation. In the same view Grande and Srinivas (2000) note that change agents should be supported with small amounts of money when conducting outreach activities.

From the findings it was revealed that students as change agents, participated in empowering communities about existing services in their communities, which they may access to improve their health and their lives, services such as PHC clinics, which are free to pregnant women, children and other vulnerable groups. This is in line with the World Health Organization (2011) on providing and empowering people on social health determinants. The results further state that change agents facilitate skills development in the communities after they have identified needs that emerged from the community profile. Various examples were given where unemployed women were taught gardening business management skills, identifying resources within the communities that they could tap into and connecting them with those resources. Another example is a project where a shop owner donated seeds and watering cans, a local small business woman ran a workshop on how to start a small business and manage your finances in order to grow your project. This project showed that change agents may work with others to ensure empowerment of the communities.

5.2.2 The Process of Developing Students as Change Agents

According to the findings of the study three categories emerged that describe the process of developing students as change agents, they are: a curriculum that is progressive in nature, a hidden curriculum component, and the nature of the educational environment.

Curriculum that is Progressive in Nature

Under the category curriculum that is progressive in nature, the following subcategories emerged: i) a paradigm shift from a traditional to an innovative curriculum, and ii) relevance and responsiveness (to the needs of the PHC oriented health service system).

Paradigm Shift from a Traditional to an Innovative Curriculum

Data sources revealed that a paradigm shift to an innovative curriculum facilitates the development of students as change agents. This subcategory comprised of a number of concepts which included: a) a community-based curriculum, b) problem-based learning, c) competency oriented approach, and d) student-centred or driven learning.

Community-Based Curriculum. The findings show that there was a paradigm shift from hospital to community-based training allowing students to be fully immersed in the communities thus enabling them to have a deeper understanding of patients' problems before they are admitted to hospitals. This exposure takes place before students are placed in hospitals. These findings are echoed by the findings of Mtshali and Gwele (2015) ; Foli, Braswell, Kirkpatrick and Lim (2014); Uys and Gwele (2005) who indicate that for students to be exposed in experiential learning they should be prepared in non-traditional settings such as communities, patients, homes and hospital-related outreach services. Foli *et al*.(2014) ; Farsi *et al*. (2010); Diab and Flack (2013) agree highlighting that placement of students in experiential learning settings is part of preparing graduates who will be able to function in all levels of the healthcare system. However, Baglin and Rugg (2010) note that in the absence of community practice experience students develop challenges in community settings.

From the findings it came out that students in a community-based curriculum are exposed to a range of learning experiences which are spread from first year to the fourth. When placed in communities they are placed for longer periods of up to four weeks. That prolonged exposure facilitates the development of skills expected from the change agents. Several studies by Nambozi and Locsin (2016) and Mtshali (2009) concur that the prolonged exposure of students in a community-based programme has been found to benefit both the students and the community.

The results of the study reveal that problem-based learning was used in the community-based curriculum. Problem-based learning emerged as key to facilitating the development of required skills from students as change agents. According to data sources central to community-based learning is the identification of health-related problems and issues following a problem-solving process of analysing existing problems, and developing and implementing interventions plans. Several studies Sockalingam and Schmidt, cited in Ndateba *et al*. (2015) and Dewey (1916) reveal that in problem-based learning students tackle real life problems and are guided by teachers on how they can effectively gather information on solving people's problems. This will allow the students, as change agents, to be role players in the implementation of problem-based learning by bringing the real change that is expected through the use of an innovative curriculum.

In addition, immersing students in communities for a longer duration enables them to have a deeper understanding of the problems of the patients before they are admitted to the hospital, as change agents are expected to understand their clients in context to provide individualised care. Through the process students discussed the problem as a group, learned problem-solving skills and gained knowledge that assisted them to come up with solutions that will allow them to solve

complex and real problems confronted by the communities. From the results it emerged that community-based education promotes group discussion enabling students to learn how to solve complex and real problems experienced by the communities. These findings correspond with the views of Uys and Gwele (2005); Sockalingam and Schmidt (2011); Schmidt, Rotgans and Yew (2011) who state that in problem-based learning students are divided into small groups to deal with problems affecting communities, and a facilitator is available to do supervision. Similarly, Pociask, David, and Shih (2017) exposed the collaborative learning strategy where students learn and share knowledge from each other to benefit academic experience as the basis of development of change agents who will be able to use scientific evidence to develop and influence policies.

In addition, the exposure to community-based learning experiences working with communities was reported from first year to fourth year and this played an important role in developing their ability to influence change, as they engaged in all the steps of the community development process. The participants reported a range of learning activities in the communities that started with identifying a problem, generating a diagnosis, and developing, implementing and evaluating an intervention plan. These learning experiences included conducting a study of a family that has a child that is under-five years, conducting an epidemiological study and a community assessment to serve as the basis for the community intervention, and evaluating the impact of the implemented intervention. These learning experiences were important in better understanding the role of a change agent. The above statements concur with Dobson (2010) sentiments in that problem solving delineates the process as: a) problem identification and formulation, b) generation of alternative solutions, c) decision making, d) solution implementation and verification.

Data also revealed that the nature of communities selected is important in developing the required characteristics of a change agent. The participants reported that they were placed in different types of under-resourced communities, which included urban, suburban, rural communities and informal settlements. This allowed the students to understand their patients or clients' context and provide appropriate care. The students learned about the social determinants of health in the communities and that allowed them to see each patient as an individual and not judge them if they were different. The findings are in line with the results of Kaye *et al*. (2011); Nambozi and Locsin (2016) mentioning that exposing students to different types of communities has the advantage of enhancing their interest to work in rural areas.

The data sources also revealed that central to the community-based curriculum used are the students. The curriculum is student-centred, with students playing an active role in the learning process and the lecturer serving as a facilitator instead of adopting a teacher directed approach. The participants shared their views that facilitators guided them and understood the content very well and gave the students the opportunity to take the lead in their own learning thus allowing them to be equipped with the skills required in the health profession. This is echoed by the findings of Sablonniere, Taylor and Sadykova (2009); Okello *et al*. (2015) ; Uys and Gwele (2005) from the constructivism viewpoint they emphasized the fact that students as health professionals are to be placed under the guidance of a supervisor so as to create opportunities for them to find meaning in what they are learning. Bjorg, Leland and Dale (2013) ; Chang, Kaye, Muhwezi, Nabirye, Mbalinda, Okullo *et al*. (2011) argue that lack of giving regular feedback and support to student's impacts negatively on the improvement of their clinical competence.

Basically, teachers are characterized as being passionate, approachable, open and welcoming in order to promote sharing of ideas, allowing for a student-teacher relationship. According to the participants this has inspired the students to develop an interest in their learning as change agents. Apart from that, giving continuous feedback and appraisal supported the development of cognitive and performance skills. In the same view, Saarikoski *et al*. (2009) agree that good qualities of facilitators promote active learning to their students.

Participants viewed the role of the learner as having shifted from being a passive receiver of knowledge to taking full participation in directing their own learning, without being led by others. According to data sources students constructed their own knowledge through meaningful experiences focusing on specific topics that they had identified from the community. This was observed while students were given projects and expected to complete a portfolio profile for the group in order to be found competent, which they completed in time and all students participated in this exercise. This is in line with the pragmatic approaches that were promoted by an American philosopher, John Dewey (1859–1952) who argued that children should be given an opportunity to interact with the environment taking active participation in the development of their own curriculum. This will enable them to take leadership in identifying issues that need to be resolved in our society thus becoming agents of change. Henson (2003); McCombs and Weimer (2002) and Yilmaz (2008) brought to light that allowing students to participate in discussions, design projects and consider topics of their own interest will promote students' experiences and link it to their previous knowledge, thus promoting meaning and interest in their learning. However, teachers need to be offered guidance and support in dealing with community health issues so as to improve students' learning (Nambozi and Locsin, 2016).

Participants indicated that self-directed learning is a strategy that was used during community-based education as a basis for experiential learning. It also emerged that self-directed learning facilitated the development of leadership, presentation, communication, writing, negotiation and self-confidence while working with communities as these skills are required for adult learners as well as change agents while providing service to the community. One participant recalled giving a presentation at a nearby school on teenage pregnancy which, according to the learners, changed their attitude about sexuality at a young age. These skills are required from the new generation of professionals to be movers and shakers of our society who will instil knowledge in fighting illiteracy on health issues. Kruger *et al.* (2015) and (Kaye *et al*. (2011) confirm that through community-based education students develop self-confidence, problem solving skills, leadership skills and communication skills required from practitioners who will serve the interests of the disadvantaged people.

Relevance and Responsiveness (to the needs of the PHC oriented health service system) The findings revealed the basics of primary health care as embedded in the PHC philosophy through the programme of community-based education .The goals of primary health care are promoted with the aim of reaching health for all. Students provide services by visiting individuals, families and groups of disadvantaged people making services relevant and responsive to the healthcare system. Talaat and Ladhani (2014) agree that in community-based education medical students are to be exposed to various rural health settings where they are accompanied by healthcare workers to conduct home visits to the people, making services accessible to them. According to the literature WHO (1978, 2013) ; Ndateba *et al*. (2015) a primary healthcare oriented health service system is primary to promote the wellbeing of all the people. Community engagement programmes

have been seen to play a fundamental role in the education of students as change agents, however Erasmus (2014) argues that these programmes have not yet brought change to the societies.

The results further stated that during the placement of students in the clinical settings the principles of social justice, fairness, community participation, accessible and affordable technology, health education focused on improving the causes of ill-health and providing services that addressed the needs of the population as stated in (WHO, 2003). This is in line with what Mackey *et al.* (2013) who mention that the fundamental principles of primary health care involve equity, participation and intersectoral collaboration but WHO (1987) and Mekwa (2014) further recommend that the nursing undergraduate curriculum should incorporate community-based education which is embedded into the framework of primary health care. The findings of this study further revealed that various community sources were used as the learning environment consisted of the following, police station, schools, pre-school and primary health care centres. These sites were found to be relevant for students to get experiential and appropriate learning. Topics that were covered were mainly health promotion. Participants appreciated the fact that they had an opportunity to visit all these areas allowing them to learn about the communities' way of life. The results further established that proper interventions were provided for the communities where services were not available, and they reached out by widening access to the disadvantaged people. It is important that students are exposed to all types of communities so that they learn about the challenges facing communities, including the burden of diseases and their diversity. This is in line with the recommendations made by the DoH (2013) and Nursing Summit (SANC, 2011) which calls for all professions to reconstruct and revitalize the nursing profession in order to achieve long health for all. Various literature WHO (1987) ; Ndateba *et al*. (2015) ; Mthembu *et al*.(2014) ; Mabuza

et al. (2013) ; Diab and Flack (2013) has spelled out the advantages of community-based education exposing these advantages of the learning environment as promoting the development of decision making skills, and diagnosing and technical skills. Nambozi and Locsin (2016) ; Chan (2004) share the same sentiments citing the advantages of the community learning sites as enhancing the professional development of students. However, Amalba *et al*. (2016) note that the learning environment provides professional socialization which will consequently influence their career choice to work in rural areas.

Preparation of Students for Community and Problem-Based Learning

The results further revealed that students were exposed to capacity building activities which included a week long orientation preparing them for learning in community-based settings, community involvement and partnerships, and a weekend retreat away from campus to build the capacity of the students to function and lead teams as well as spending time in the simulated clinical skills laboratory to learn some basic skills required when working in community-based settings; skills such as how to prepare relevant health education messages, health education strategies and how to prepare messages for different groups. This allowed the students to first sharpen their skills and to build up confidence before they implemented what they were taught during orientation. Literature supports the view of students being given orientation in a form of blocks before they are exposed to clinical placements (Diab and Flack ,2013; Kaye *et al*., 2011; Salmon and Keneni, 2004).

Hidden Curriculum

Under the category hidden curriculum, i) service learning aligned with curricular outcomes, and ii) learning from non-curricular aspects of educational experience, were derived as subcategories.

Service Learning Aligned with Curricular Outcomes

The results of this study revealed that change agents incorporated knowledge, values and skills as they provided service to the community. Essentially these competencies are critical outcomes in preparing graduates who will be competent in providing services that will respond to the priorities of the healthcare systems. This is echoed by the results of Hole, Brenna, Graverholt, Ciliska and Nortvedt (2016) who indicate that students gained personal knowledge and skills, self-efficacy and analytic competence in order for them to be considered as change agents. According to the 1996 recommendations made by the National Commission of Higher Education (NCHE) which states that the curriculum of students should be revised to align competencies and attitudes which will respond to the healthcare needs of the population. Kaye *et al*. (2011) exposes the competencies which emanate from experiential learning as including collaborative skills, knowledge, clinical skills, teamwork, learning assessment methods and assessment of competence.

The findings further revealed that assessments were carried out comprehensively, focusing on the needs of individuals, families and communities using appropriate technology in order to come up with relevant diagnoses. This is supported by Kaye *et al*. (2011) who indicates that continuous assessment methods and feedback are to be performed as an end product in achieving competencies. Additionally, documentation on assessments and recommendations carried out on the identified problems. The results further showed that change agents shared their responsibilities

and transferred various skills by teaching junior students, supervision and management function as an independent function of a professional nurse.

This view is supported by Uys and Gwele (2005) who mention management, clinical, and comprehensive assessments as competencies required from practitioners after graduation to be implemented by practitioners in rendering services to the community. This view is further supported by the WHO (1985) who recommend that the curriculum for a community healthcare practitioner should allow them to identify, assess, plan, implement, and evaluate the population health at risk.

Data sources revealed that health promotion and illness prevention formed part of the strategies used in the curriculum content, as outlined in the Ottawa Charter for Health Promotion (1986). The findings indicate that participants were supervised by facilitators in order to implement the curriculum while they were allocated in the PHC settings, doing home visits on families and individuals on the following content: child health, focusing on the following strategies, growth monitoring, breastfeeding, immunization, female education, first aid and family planning (GOBIFFF). These findings are supported by the WHO (1987) cited in Mthembu (2015) who indicate that the GOBIFFF strategy is a means of achieving the goals of health for all by the year 2000. Change agents will implement the strategy in order to improve the lives of the people. The results further indicated that participants gave health education on communicable and non-communicable diseases, giving advice on the prevention of chronic conditions, nutritional problems focusing on the elderly people and maternal health, environmental health and social problems. This is in line with Anderson and Goode (2006) who identified that health professionals,

including pharmacists, can be effective agents of change in the implementation of wellness and disease prevention programmes to meet the goal for healthy people in 2010.

Learning from Non-Curricular Aspects of Educational Experience

Participants indicated that they were given assignments early in the course so that they understood what was expected of them. They further mentioned that they were actively involved in taking full responsibility for their own learning and dedicated to completing assignments that were given to them. This is qualified by Ju (2016) who mention that through self-directed learning students will be able to direct their own learning. It is expected that students as change agents will be actively involved and take control of their own learning, this will increase their mastery skills and enhance their reasoning skills.

The findings of this study revealed that during the learning process participants were assessed on compiling a community profile, doing an epidemiology study, participating in community interventions, and doing a family study. This is supported by Kaye *et al*. (2011) in a study conducted in Ghana, which mentions that the method of assessment used in community-based education comprises of written reports, feedback, observation and case presentations. Furthermore these methods were found to promote problem solving, develop collaborative skills, innovation skills, communication skills, critical reflection, teamwork and interpersonal relationships, which are all skills relevant for change agents.

Participants further mentioned that they participated in programme evaluation at the end of the learning experience to assist with improvements on how the course can be delivered**.** Bailey *et al.*

(2015) shared findings on a study in which programme evaluation was conducted by MEPI in order to strengthen community-based initiatives in the African continent.

The results of this study reveal that performance-based assessment was conducted during field activities, which was found to be sensitive to the objectives of community-based education in producing health professionals who will be responsive to the needs of the community. These findings are supported by WHO (1987) and Mthembu *et al.*(2014). The results exposed that the community formed part of the assessment of students, this gave them an opportunity to give feedback on the service provided by students and the integration of nursing values on the profession. Kaye (2011) shares similar sentiments stating that the role of involving communities in community-based education improves clinical education. Facilitators were reported to be well informed with the assessments of the students in a community-based environment. Arguably Kaye *et al*. (2011) state that facilitators should undergo training prior to conducting assessments in order to positively manage the discussions and give feedback to the students.

The nature of the assessments was mainly problem-solving oriented, focused on the individuals and conducted during the learning experience. Additionally, authentic assessments were conducted during the implementation of interventions or needs-based interventions. This is in line with the views of Ju (2016) who mentions that the nature of assessments in problem-based learning requires students to search for answers to problems identified, and this will improve their reasoning skills.

Educational Environment

Democratic School Embracing Social Accountability Values

Participants gave their views that through collaboration with the communities and among each other this gave them an opportunity to share their experiences. This was observed in the increased communication between the learners, facilitators and other members of the multidisciplinary team while planning for interventions. One participant expressed her views that working together with senior students who were knowledgeable, afforded her an opportunity to learn from others and reflect on that. Participants further mentioned that the advantage of holding subsequent meetings with the facilitators gave them the opportunity to solve real problems of the community enhancing their critical thinking and academic skills. The findings further revealed the importance of information sharing and reflection during and after the exposure of experiences between change agents and facilitators. It came out that facilitators supported the students by way of a dialogue addressing gaps with students and how they can handle their academic and personal issues in the future. Pociask, David, and Shih (2017) share the same sentiments in that information sharing has the advantage of encouraging students to share their views and to interact with each other thus implementing transformative learning. Daniels *et al*. (2015) concur that the role of facilitators in community-based education is to support students with the challenges they face on a daily basis and give them feedback. Branch and Paranjane (2002) note that reflection promotes academic growth to students. Uys and Gwele (2005) maintain that collaborative learning is supported by reflection, communication, and decision-making skills, however DesSantos-Madeya (2007) argues that an environment which lacks support from facilitators lessens the development of decision-making skills, critical thinking and problem-solving skills.

Wearing of a uniform was mentioned as an image displaying professionalism among the students and they mentioned that they identified themselves as caring for the communities. Participants emphasized the fact that professional values should enhance good interpersonal relationships between change agents and the community. Participants mentioned commitment and dedication as their strong motivators and characteristics which were found to be essential in developing trust, while students provide services to the community, listed as: respect, which incorporates empathy, provision of information, understanding individuals as they are and paying attention to their needs; these will improve good interpersonal relationships between patients and the students. Professional conduct and dress code is noted by Devnarain and Naidoo (2009) as being key in practice while preparing doctors for service learning.

5.2.3 Conditions that Facilitate the Development of Students as Change Agents

Aspects Related to the Facilitators

The results of this study reveal that facilitators offered support both in the classroom and clinical sites by supervising and guiding the students. Basically, facilitators are to be side by side helping students during the learning process, however it emerged that students managed problems on their own thus developing critical judgment. Chipchase *et al*. (2012) and Harris (2007) concur that facilitators are to supervise students during clinical placement in order to guide them towards discovering answers rather than providing them with solutions. This is further seconded by Dale *et al*. (2013) who state that it is in the best interest of the students to have a facilitator who will provide supervision and give them support, so that they learn to become independent. Contrarily, Kilminster *et al.* (2007) ; Onuoha, Prescott Carter and Daniel, (2016) observe that the absence of supervisory skills during clinical placement has led to inadequate preparation of students in

developing them as change agents, but Delany and Molloy (2009) expose the role of facilitators; which is to assist students to reflect and learn on their experiences, enhancing their good decision-making skills.

From the findings, a positive learning environment was precipitated by mutual respect, openness, warm welcoming and friendliness, allowing the exchange of ideas to take place, and which yielded positive results on the development of students as change agents. Similarly, facilitators paid attention to students' needs and problems, shared their time and allowed themselves to learn from students; and students learned from facilitators. Stokvaard (2004) cited in Leland *et al*. (2013) concurs that supervisors undertaking regular dialogue, feedback and reflection with students is significant to learning. It was further revealed that facilitators utilized their expertise in community-based education which was observed through continuous feedback to the students and resulted in improved knowledge and communication. The nature of problem-based learning requires that facilitators are knowledgeable on the content in order to give proper guidance to learners throughout the learning process.

Aspects Related to the Student

The findings reveal that shared decision-making was achieved through dialogue among students by reaching consensus in solving community problems. This was reported to have benefitted the disadvantaged people on health promotion, and it further emerged that senior students mentored the junior students to further understand their objectives. Likewise Hogan, Fox and Barratt-See, (2017) implemented a midwifery programme utilizing third-year students to mentor first-year students, and this revealed positive results on the development of mentoring and leadership skills

as well as offering support to the junior students who were not oriented to the clinical settings. Emenyeonu (2012) ; Giordana and Wedin (2010) add that the exchange of ideas has been found to bear positive results among students and also encourages critical thinking. Sharing of ideas strengthens students' critical thinking thus enhancing good interpersonal relationships between each other. The findings show the importance of forming partnerships between the community and students, which had a huge impact on students in gaining knowledge and giving feedback to communities during community interventions. Nambozi and Locsin (2016); Gillies and Boyle, (2011) acknowledge that collaborative learning between the community and faculty, benefits students to achieve meaningful learning. A structured and planned orientation programme providing students with the learning package allows students to be introduced into community-based practice before they can be placed in the communities.

The findings further reveal qualities such as motivation, leadership, communication and commitment to have played an important role in developing students as change agents. These qualities were reported by participants to have inspired them in pursuing their goals and further helped the community to achieve better outcomes. Amalba *et al.* (2016) agree that interpersonal relationships, including communication, achieves a positive outcome in influencing doctors to be willing to work in the community setting while doing community-based education. In the same view, Cross (1999) brings to light that undergraduate physiotherapists as agents of change are expected to have good communication skills, show a readiness to learn, have empathy, knowledge, and show commitment during their clinical placement. Furthermore Cross (1999) exposes unprofessionalism, such as arrogance, as an attribute which can have a negative impact on the development of human relations. From the above authors it is clear that change agents are to

present with various attributes, resulting in a positive relationship between clients and students, and thus influencing personal and professional growth.

Aspects Related to the Institution

From the study it emerged that the institution used innovative teaching strategies and sources such as a library, books, Wi-Fi, and mobile devices were provided to students to enhance learning. The findings are in line with the findings of the following literature; Forbes, Oprescu, Downer, Phillips, McTier, Lord *et al*. (2016); Xu (2016) and Harerimana *et al*. (2016) in studies conducted which mention that innovative teaching strategies such as online learning using computers and the internet, are student-centred learning strategies allowing programmes and information to be easily accessible for students, and to make teaching interesting and real. Harerimana *et al*. (2016) adds that on-line learning promotes students to learn independently, however Forbes *et al*.(2016) ; Sit, Chung, Chow and Wong, (2005) exposes a view that students using online learning find themselves unable to interact with each other, discouraging peer support and hindering discussion. Remarkably, transport and facilitators were available on the learning site to support students in reaching out to communities, conversely some students reported challenges with transport complaining about paying money out of their own pockets. Amalba *et al.* (2016); Talaat and Ladhani (2014) and Mabuza *et al*. (2013) agree that transport and human resources are some challenges encountered by students in a community-based learning programme.

Aspects Related to the Community

The results show that students received an overwhelming amount of support from the community. This was observed when the community provided them with resources that were used such as

churches, schools, community halls which were among places that were used to conduct interventions. Participants mentioned that they benefitted from the communities as they took part during interventions and communities benefitted from the service they received from the students. A good relationship between the community and the students was reported. This is supported by Diab and Flack (2013) and Mabuza *et al*. (2013) who reveal a strong relationship between quality of stakeholders and programme performance. Kaye *et al*. (2011) ; Glasser, Hunsaker, Sweet, MacDowell and Meurer (2008) note that community engagement promotes the implementation of experiential learning in community-based education.

From the authors it is clear that the community values the presence of students as change agents as they provide a service to them. This is revealed by the assistance offered to the students by availing their equipment to be utilized while conducting interventions.

5.2.4. Consequences of Developing Students as Change Agents

Empowered Students

Participants indicated that the benefits of being developed as change agents afforded them the opportunity to be socialised into the profession. It also came out that through transformative learning, students' knowledge is enhanced in correlating theory with practice and thus increasing their knowledge on issues of diversity. This allowed change agents to be sensitive to the cultural and ethical beliefs of the people. This is supported by (Mtshali, 2009) who indicates that students as change agents should gain cultural skills exposing them to diverse populations. Anderson *et al,* (2011) insists that students should always be placed in the communities so that they can learn about the role of culture in teaching and learning.

The results reveal that developing students as change agents stimulated them to work as a team and has been found to promote strategies that allowed the development of critical thinking skills such as self-directed learning, leadership, and writing and communication skills. These competencies are required from practitioners who will be able to take initiative on issues affecting them and improve their own learning. This is in line with Amalba *et al*. (2016) ; Nambozi and Locsin (2016) who state that CBE has been found to improve the learning process, increase group participation and collaboration. Participants further stated that they developed collaborative skills through sharing information and ideas with each other, communities, NGOs and facilitators. Self-directed learning assisted them to be involved in their own learning and took action on issues that directly affected them which is expected to them as change agents. Kaye *et al*. (2011) add that the benefits of empowering students influenced local policy and practice. The results reveal that the introduction of an innovative curriculum benefitted the students' development of critical thinking skills, communication skills and decision-making skills, placing them in a good position to be regarded as agents of change in transforming the lives of the disadvantaged people.

This was revealed by students when they managed to negotiate with sponsors to assist them in planning and implementing interventions in various communities, thus equipping the communities with life skills. These skills have been widely documented by Kreber (2012); Weimer (2002) ; Dunne *et al.* (2011) and Mtshali and Gwele (2015) as they emphasized the benefits of progressive education versus traditional methods of teaching. The above authors affirm that in an innovative curriculum students are required to use creative thinking and critical thinking in order to make their own judgment to solve people's problems and to enhance their skills and the competencies required for graduates to apply independently while working with communities.

Widening access to health care services

The results revealed that developing students as change agents allowed the students to learn through providing service to the community which is the basis of primary health care approach in providing service to the disadvantaged people. Participants provided service to various communities and reach out to families and individuals who dint have means to accesses service by visiting them in their homes. These in in line with the report submitted by Gaede and Versteeg (2011) on the benefits of providing enough staff to provide access of services to the poor people in South Africa.

Raising the Consciousness of Students on Health Issues

The results of the study indicate that consciousness raising allowed students to alert and motivate others to the need for change so that they become aware of their actions and are able to influence the community to change from their old habits. This is echoed by the findings of Carter, Fournier, Grover, Kiehl and Sims (2005) who mention that this has a benefit on the community to be empowered to have control over their own lives. Participants showed an interest in community-based education as they alluded that they themselves learned from these experiences which further informed them to change their own behaviour towards health-related issues. One participant mentioned that she benefitted from a teenage pregnancy discussion as she was now aware of the dangers of teenage pregnancy and was further empowered in life skills. Similarly, McCloughen and Foster (2017) reveal that nursing and pharmacy students as change agents can use their experience of emotional intelligence to overcome stress they normally encounter on their day to day practice.

Self-Reliant Community

The findings show that health education was used as a tool to address social determinants and enabled people to make informed decisions about health-related issues. Data revealed that empowerment on health education to individuals, families and groups in community settings demonstrated client participation to comply with health recommendations thereby addressing the universal right to health and reaching the goal of 'health for all' as suggested by the WHO (2006, 2014). It also came out that students educated communities on the maintenance of good sanitation, environmental health and personal hygiene. The findings revealed that pupils at schools were sensitized to various health-related issues including HIV and AIDS, drug abuse, and teenage pregnancy, so that they can become aware of these problems and learn how to prevent them.

Faculty Improvement

It emerged that through collaboration between students, peers, facilitators and the community has benefits to the development of new ideas in helping to bring innovations that will influence laws and policies in evidence-based practice. The findings further revealed that a transformative learning programme was found to be in line with preparing students who will provide services that are relevant and responsive to the national health policies of South Africa, however inputs were given by participants on how delivery of services can be improved. This is supported by Mthembu *et al.* (2014) and Gwele (1997) who state that producing graduates with the necessary knowledge and skills will bridge the gap in providing the necessary abilities in the changing healthcare climate.

The findings reveal that the incorporation of technology into the whole curriculum to assist learners to easily identify problems and make necessary interventions in solving problems of the

community is beneficial. Harerimana *et al*. (2016) approve the use of e-learning in nursing education as it assists students to get a quality education. This will give recognition to the entire faculty for ensuring that they produce competent nurses who will meet the diverse needs of the whole population as required by the health profession. According to Mintz, Low, McCurry and Lipman (2017) ; Brown and Schmidt (2016) students as change agents are placed in the community by using service learning strategies that enable them to develop critical thinking skills and leadership skills as they provide a service to the community. The findings of Simons and Cleary (2006) advocate that service learning has a positive impact on the development of social, academic and personal aspects of the student.

5.3. Limitations of the Study

This current study did not look at the views and attitudes of the communities with regard to the perception of students as change agents in the implementation of a community-based education programme. Communities are the recipients of the programme while students are providing a service to the community. Another limitation is that the researcher used purposive sampling in the study while students where already having knowledge about transformative learning and on being change agents. It is predicted that if random sampling was used more information on challenges faced by students could have been identified. Further research is recommended to look at the perceptions of the communities regarding students as change agents in the implementation of community-based transformative learning programmes so that their views are documented as well.

5.4. Recommendations

It is recommended that students be made aware early in the programme of the competencies, as they are expected to be change agents at the end of the programme, and how the learning experiences in the programme are used to shape these competencies. There should be a structured

way of monitoring the development of the required competencies, as early on as from first year so as to provide the necessary support timeously. The use of innovative teaching strategies will assist students to develop critical thinking skills, communication and creative skills thus becoming effective change agents. Educators should introduce learners to the theory of transformative learning and should provide necessary tools for students to be able to develop critical analytical reflection in the changing world so as to become better change agents. The use of transformative learning Programmes including community based education could be used to shape the nursing education Policies that will enhance the development of students as change agents. Further research can enlightened policy makers to use transformative learning in order to prepare students as change agents thus improving the quality on patients outcomes.

A broader study is required with diverse participants that should comprise academics, community members and other stakeholders involved in developing students as change agents, to add value on the body of knowledge, and this study should adopt multiple methods and sources of data collection. Further research is recommended as this study presents only the views of the students as it was for a mini thesis

5.5. Conclusion

This study was established to explore students as change agents in a community-based transformative learning programme at a selected institution. The objectives of the study exposed valuable information on students as change agents. The findings of this study revealed that change agents are viewed as problem solvers, action researchers, have got an empowering and an advocacy role while providing a service to the community.

It can be concluded from the study that change agents have a transformative power to change society through transformative learning. The use of community-based transformative learning

programmes allow access for students to become aware of their social responsibility thus liberating communities from social injustice. The society requires change agents who are critical thinkers and capable of solving people's problems thus bringing change to the health of the entire population.

The findings showed some advantages in developing student as change agents. Students are developed as change agents to enhance their interpersonal skills, collaboration, reflection, decision making and critical thinking skills. Community-based transformative learning utilizes multimedia, which assisted change agents to easily convey health promotion messages aimed at changing the behaviour of the people, as a basis of experiential learning. Change agents provide service learning and making services to be available to the disadvantaged people. Communities are taught skills to become self-reliant. Facilitators are seen to have benefited in implementing the transformative learning programme which is relevant and responsive to the training of undergraduate students.

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Appendix 1: Information leaflet

Study title**: Exploring Undergraduate Nursing Students' Perceptions on being Change Agents in a Community-Based Transformative Learning Programme at a Nursing Education Institution in KwaZulu-Natal**

Dear Nursing Students,

I, Mrs V.I. Mncina, a student at the University of KwaZulu-Natal am doing Masters in Nursing Education. As part of my studies at the university I am required to conduct a study in an area of my interest. The aim of this study is to explore undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme at a nursing education institution in KwaZulu-Natal.

Participants in this study are nursing students who are enrolled in 2nd, 3rd and 4th year level at the selected nursing education. Focus group interviews will be used to collect data and will last for a duration of approximately 90 minutes. The focus group interviews will be audio recorded with the permission of the participants.

The researcher will liaise with your academic director for the venue and time to conduct the study. Your information will be treated with utmost confidentiality. Any personal information will not be disclosed unless required by law. There are no expenses involved because the study will be conducted during usual school days during lunch time.

The study findings may help to influence nurse educators to develop a curriculum that accommodates undergraduate nursing students in higher education, and influence nurse educators to use innovative teaching strategies in higher education. Findings from this study may also help nurse educators to identify barriers among undergraduate nursing students' perceptions on being change agents in a community-based transformative learning programme. The findings of the study may also help in the development of nursing curriculum for the better performance of nursing practice. Findings from this study may assist in providing policy makers in higher education with scientific evidence on how to address the factors influencing undergraduate nursing students' adjustment to using community-based education in the community. The findings from this study could also enlighten policy makers on innovative teaching strategies used in higher education, thus helping them to plan the budget properly for buying the necessary equipment.

You are welcome to ask any questions if you do not understand what is expected of you. You are free to participate or not to participate in this study. You are free to withdraw from the study at any stage without repercussions. There will be no risks attached to your participation. The results of the study will be made available to you on completion of this study

Thank you for your time and cooperation.

Yours sincerely,

Signature……………….

Mrs V.I Mncina	Email: mtshalin3@ukzn.ac.za
Date………………..……	Contact number: 031 260 2494
Contact detail of the researcher	HSSREC Research Office: Mariette Snyman
Ms V.I Mncina	Contact number: 031- 2608350
Contact number: 0835308558	Email: snymanm@ukzn.ac.za
Email:violetmncina@gmail.com	

Supervisor contact detail

Professor. N.G Mtshali	HSSREC Research Office: Mariette Snyman
Howard college campus	Contact number: 031- 2608350
School of Nursing and Public Health	Email: snymanm@ukzn.ac.za
4TH Floor Desmond Clarence Building	
4041 Durban. South Africa	

Appendix 2: Informed Consent Form

STUDY TITLE: Exploring Undergraduate Nursing Students' Perceptions on being Change Agents in a Community-Based Transformative Learning Programme at a Nursing Education Institution in KwaZulu-Natal.

Please answer the following questions:

Questions	Yes	No
Have you read and understood the information sheet about this study?		
Have you been able to ask questions about this study?		
Have you received enough information about this study?		
Do you understand that you are free to withdraw from this study		
at any time?		
Without giving a reason for your withdrawal?		
Your responses will be anonymised before they are analysed		
Do you give permission for members of the research team to have access to your anonymised responses?		
Do you agree to take part in this study?		

Your signature will certify that you have voluntarily decided to take part in this research study having read and understood the information in the sheet for participants. It will also certify that you have had adequate opportunity to discuss the study with an investigator and that all questions have been answered to your satisfaction.

Permission for audio-recording: Please tick

➢ I hereby consent to have this interview/focus group discussion recorded

➢ I do not consent to have this interview/focus group discussion recorded

Signature of participant   **:**   Date   :

Signature of investigator   **:**   Date   :

Signature……………….   4TH Floor Desmond Clarence Building

Mrs V.I Mncina   4041 Durban. South Africa

Date……………..……   Email: mtshalin3@ukzn.ac.za

Contact detail of the researcher   Contact number: 031 260 2494

Ms V.I Mncina

Contact number: 0835308558

Email:violetmncina@gmail.com

Supervisor contact detail

Professor. N.G Mtshali

Howard college campus

School of Nursing and Public Health

HSSREC Research Office: Mariette Snyman

Contact number: 031- 2608350

Email: snymanm@ukzn.ac.za

HSSREC Research Office: Mariette Snyman

Contact number: 031- 2608350

Email: snymanm@ukzn.ac.za

Appendix 3: Focus Group Interview Guide

Pseudo/Identification Code
Study Level Code

Introduction

Recording starts…
Good morning! Thank you for agreeing to meet with me and share your views.
As you may know, the purpose of this focus group is to explore undergraduate nursing students' perceptions on being change agents in a community based transformative learning programme at a nursing education institution in KwaZulu-Natal.
Before we begin, let me review some important considerations. I am recording this interview to ease the further analysis of qualitative data but will keep all responses highly confidential.
By accepting to be interviewed/to participate in the focus group discussion, you confirm that you have consented to participate in this study and that the focus group discussion can be audio recorded.
I am just as interested in both negative and positive comments and often the more challenging and in-depth comments are the most helpful.

Icebreaker:

- How long have you been a student at this institution?
- When is the last time you did community practices and for how long?
- Did you enjoy the community practice? If yes, why?

1. What is your perception about the importance of community-based learning?

    - How do you perceive being a change agent in the community-based learning?

    - How do people around you know that you are a change agent in your community?

2. During your community practices, can you share with us the activities you have performed in the community?

    How did the activities you performed respond to the needs of the community?

3. What role did you play in the community of practicing as a change agent?

4. How does your institution/teacher facilitate you during community-based practices?

    - How does the facilitation prepare you to become a change agent?

    - What support do you get from the institution/teachers and the community during the community practices?

5. What challenges or barriers have you encountered during the community practices? Can you tell us how these challenges can prevent you from becoming a change agent in your community?

6. What suggestions would you propose to the institution/teachers/community/fellow students in order to enhance community-based training that would allow students to become change agents?

Is there any other thing that you would like to share with us that we did not cover in this focus group discussion?

Thank you for your participation.

Appendix 4: Request to conduct research

The Registrar

University of KwaZulu Natal

Department of Nursing

Durban

4041

29.09.2016

Dear Sir/Madam

Re: Application for permission to conduct research at the University of KwaZulu-Natal

I am a coursework Master's student at the University of KwaZulu-Natal, School of Nursing.

The title of my study is: **Exploring Undergraduate Nursing Students' Perceptions on being Change Agents in a Community-Based Transformative Learning Programme at a Nursing Education Institution in KwaZulu-Natal.**

I would like to commence data collection process in October 2016. This will be done at convenient times during lunch breaks and tea times. The target group for my study is 2nd, 3rd and 4th year undergraduate, Bachelor of nursing students.

The data collection process will uphold confidentiality, anonymity, informed consent and freedom of choice.

Hoping that my request will meet your favourable consideration.

Yours faithfully,

Violet. I. Mncina

Student number: 216075265

Cell number: 0835308558

Email:violetmncina@gmail.com

Appendix 5: Letter of support to conduct study from the UKZN Nursing Department

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

25th October, 2016

<u>Re: Gatekeeper Letter- Discipline of Nursing Support for a Research Study (Masters in
Nursing Education)</u>

Dear Ethics Committee Member,

We are pleased to provide this letter of support for the study entitled "Exploring
undergraduates Nursing Students' Perceptions on being change agents in a community based
transformative learning program at a Nursing Education Institution in KwaZulu-Natal"
(Student details: Ms V Mncina – 216075265).

The proposed study has been reviewed and supported in the Discipline of Nursing and
permission is granted for the student to engage with the selected undergraduate students from
the Bachelor of Nursing programme in terms of data collection. The Discipline of Nursing
requires Ms Mncina to negotiate with the undergraduate coordinator to meet at a time that is
convenient for the lecturers and students.

This study is provisionally supported by the Discipline of Nursing following full ethical
approval from the University's ethics committee. We wish the student and supervisor all the
best with the completion of the study.

Yours sincerely,

Dr. Joanne R. Naidoo

Lecturer & Postgraduate Nursing Coordinator

School of Nursing and Public Health
Postal Address: University of KwaZulu-Natal, School of Nursing and Public Health, Howard Campus, Private Bag X 54001,
Durban, 4000
Telephone: +27 (0) 31 2602499 Facsimile: +27 (0) 31 2601543 Website: www.ukzn.ac.za

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Appendix 6: Approval letter to conduct research University of KwaZulu-Natal

UNIVERSITY OF ™
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

4 October 2016

Mrs Violet I Mncina (SN 216075265)
School of Nursing and Public Health
College of Health Sciences
Howard College Campus
UKZN
Email: violetmncina@gmail.com

Dear Mrs Mncina

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN) provided Ethical clearance has been obtained. We note the title of your research project is:

"Exploring Undergraduates Nursing Students' Perceptions on being change agents in a community based transformative learning programme at a nursing education institution in KwaZulu Natal".

It is noted that you will be constituting your sample by performing interviews and/or focus group discussions with 2nd, 3rd and 4th year undergraduate Bachelor of Nursing students from the College of Health Sciences on the Howard College Campus.

Please ensure that the following appears on your notice/questionnaire:
- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book.
Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

MR SS MOKOENA
REGISTRAR

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Appendix 7: Approval Letter from the Ethics Committee

UNIVERSITY OF ™
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

8 November 2016

Mrs Violet Iris Mncina 216075265
School of Nursing and Public Health
Howard College Campus

Dear Mrs Mncina

Protocol reference number: HSS/1910/016M
Project title: Exploring undergraduates nursing students' perceptions on being Change Agents in a community based transformative learning program at a nursing education institution in KwaZulu-Natal

FULL APPROVAL-NO RISK

In response to your application received 3 November 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee
/pm

Cc. Supervisor: Professor NG Mtshali
Cc. Academic Leader: Professor B Sartorius
Cc. School Administrator: Ms Caroline Dhanraj

Appendix 8: Letter for Proof of editing

Barbara Dupont Language School

a member of Small Giants (Pty) Ltd

SMALL GIANTS

37A Hilltop Road

Hillcrest

3610

Cell No: 0846668351

26th November 2017

To Whom It May Concern

EDITING OF DISSERTATION

I hereby confirm that I, Barbara Dupont, edited the dissertation written by VIOLET IRIS MNCINA, titled "EXPLORING UNDERGRADUATE NURSING STUDENTS' PERCEPTIONS ON BEING CHANGE AGENTS IN A COMMUNITY-BASED TRANSFORMATIVE LEARNING PROGRAMME AT A NURSING EDUCATION INSTITUTION IN KWAZULU-NATAL" and commented on the grammatical anomalies in MS Word Track Changes and review mode by the insertion of comment balloons prior to returning the document to the authors. Corrections were made in respect of grammar, punctuation, spelling, syntax, tense and language usage as well as to sense and flow. Reference guidelines and additional comments were provided to assist with corrections.

I have a been teaching English for the past 10 years, and have a Cambridge CELTA diploma in teaching English as a foreign language. I am also employed by the British Council as an official IELTS examiner for South Africa. I have been editing academic and other documents for the past two years, regularly editing the research dissertations, articles and theses of the School of Nursing, Environmental Studies and various other schools and disciplines at the University of KwaZulu-Natal and other institutions, as well as editing for publishing firms and private individuals on a contract basis.

I trust that the document will prove acceptable in terms of editing criteria.

Yours faithfully

B Dupont

Barbara Dupont