Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness

by

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Dissertation submitted in fulfilment of the requirements for the degree
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JUNE 2015

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DECLARATION

I hereby declare that the work submitted in this dissertation is the result of my own independent investigation. Where assistance was sought, it has been acknowledged. This work is submitted for the first time at this university/department towards an MSc (Physiotherapy) Degree and it has never been submitted to any other university/department/faculty for the purpose of obtaining a degree.

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I hereby cede copyright of this research study in favour of the University of the Free State.

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LIST OF ABBREVIATIONS

APTA American Physical Therapy Association

APA Australian Physiotherapy Association

CHWs	**Community health workers**
CMT	**Community Media Trust**
COPD	**Chronic Obstructive Pulmonary Disease**
DoH	**Department of Health**
HIV/AIDS	**Human immunodeficiency virus/ acquired immunodeficiency syndrome**
NHI	**National Health Insurance**
NHP	**National Health Plan**
NHS	**National Health Service**
NGO	**Non-Governmental Organisations**
PHC	**Primary health care**
RPL	**Recognition of prior learning**
SA	**South Africa**
SASP	**South African Society of Physiotherapy**
TB	**Tuberculosis**
UFS	**University of the Free State**

ABSTRACT

Key Words:

- Primary Health Care
- Community Health Workers

- Health Promotion
- Prevention of Illness
- Community Physiotherapy
- Re-engineered Health Plan
- Inter-Disciplinary Co-operation

Introduction

The Department of Health has proposed a new health plan to re-engineer primary health care within South Africa which will shift the focus from hospitalisation towards the treatment of conditions at primary care level in the community (RSA DoH 2011:1). Community health workers (CHWs) will be identified and trained to be involved in the promotion of health and the prevention of illness.

In order to achieve these health goals it will be important that the contribution of each team member, including Physiotherapists and the CHWs, is clear and known to the rest of the health care team.

Aim

The main aim of this study was to determine the perceptions, attitudes and practices of CHWs in the Thabo Mofutsanyane District (Free State) with regard to health promotion and prevention of illness, as well as inter-professional referral or cooperation with physiotherapists related to this.

Methodology

In realising the main aim of this study, after ethical approval (ECUFS NR 174/20134) data were collected by means of a short demographic questionnaire, as well as focus group interviews.

Findings

The central perceptions, attitudes and practices of CHWs in this study focused on training, support and support systems as well as service delivery and patient care. CHWs expressed a need for improved and continuous structured training opportunities. These training opportunities could further be enhanced by the establishment of good support structures, and improved interdisciplinary teamwork, which would in return improve service delivery, patient care and ultimately health outcomes.

Conclusion and Implementation of findings

The findings of this study portrayed some limitations within the CHW-context of the piloted re-engineered primary health care system within South Africa. These findings could assist the DoH of the Free State to improve, amongst others the training and support systems for CHWs within the re-engineered primary health care system.

1. CHAPTER ONE: BACKGROUND AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The health care approach worldwide has recently shifted towards a more promotional and preventative one. This shift is supported by the results from the Global Burden of Disease Study performed in 2010 (Horton 2012:2053). According to the findings in this study, fewer people die due to maternal and child illness than 20 years ago, but more young adults suffer from specifically non-communicable diseases that could lead to death and disability worldwide (Horton 2012:2053).

Linking onto this theme of promotional and preventative health care, the South African Department of Health (DoH) has proposed a new health plan to re-engineer primary health care (PHC) within South Africa (SA) that shifts the focus from hospitalisation to the management of health conditions at primary care level in the community (RSA DoH 2011:1). This new health plan also clearly provides for the inclusion of community health workers (CHWs) to assist with health care delivery in the community. The DoH of SA stipulates the central role of these CHWs as health promotion and the prevention of illness, specifically within the areas of maternal and child health, HIV, tuberculosis (TB) and chronic diseases [Community Media Trust (CMT) 2011:7]. This initiative also forms part of the National Health Insurance (NHI) plan developed by the DoH in order to restructure the entire concept of health insurance and patient care within SA (RSA DoH 2011:1).

The commitment towards improved PHC, with its central focus of health promotion and the prevention of illness, is not only emphasised by governments worldwide, but is also explored by other health care stakeholders, such as the World Confederation of Physiotherapy (WCPT). Several surveys with regard to PHC have been conducted by the WCPT, and this institution has contributed to international views of PHC by producing a spectrum of informative and expert resources towards PHC from a physiotherapy perspective (WCPT 2013:29). This commitment stems directly from the scope of the physiotherapy profession which in SA, also includes health promotion and the prevention of illness, along with patient screening, basic first aid, patient support and education as well as counselling and inter-disciplinary referral [(HPCSA 1976:7) noted as an aged reference, yet no updated version available] as some of the responsibilities to be performed by qualified physiotherapists.

The overall emphasis on health promotion and prevention of illness worldwide, as well as the involvement of CHWs and physiotherapists in these areas has formed the basis for the research question pertaining to this study.

1.2 LITERATURE CONTROL AND PROBLEM STATEMENT

The goal of any health care system is to improve and promote the health of the people by providing access to quality services that are efficient and effective. In SA, as with many other African countries, this goal is, however, challenged as many of its people live in remote areas and suffer poverty. With the re-engineered PHC plan, the South African DoH aims to eliminate the current system where those with the greatest needs have the least access to health care and the poorest health outcomes (RSA DoH 2011:1). PHC re-engineered services provided by CHWs are expected to be more attentive to the specific needs of that community than clinic- or hospital-based care, to be more cost-effective for the government and to instil a sense of self-responsibility in the members of a community (Lehmann *et al.* 2004:3).

Within the re-engineered PHC plan, ward-based outreach teams will be implemented and will consist of a clinic sister or professional nurse and a number of CHWs reporting directly to him/her. Each PHC outreach team will be responsible for approximately 1500 families. The number of teams will be determined by the population size and every CHW will be assigned approximately 250 families (Schneider 2012:15).

CHWs will play an important role in educating, supporting and counselling the community to make informed decisions on matters that affect their health by raising awareness and increasing knowledge about risk factors, health promotion and illness prevention (Boutin-Foster *et al.* 2007:61). Child, adolescent and women's health is a priority in an attempt to decrease mortality rates. Another integral part of the responsibility of CHWs will be the referral of patients to other health care disciplines as necessitated. As physiotherapists are part of the multi-disciplinary team, also on PHC level in SA, referral to- and interaction between CHWs and physiotherapists is thus inevitable within the new proposed SA health plan. This possible interaction could make a positive contribution towards the common goal of health promotion and the prevention of illness.

The World Health Organisation defines the term Health Promotion as "*the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions*" (WHO 2015:1).
When looking at the role of physiotherapists in health promotion and the prevention of illness, Rural Rehab South Africa (RuReSA) (2011:10) describes the role of physiotherapists in the re-engineered PHC plan as follows:

- To give support in the following areas: antenatal care; postnatal care; the parents of children with disabilities and/or cerebral palsy; mental health and depression; chronic diseases; disability and the aged.
- To increase community awareness with regard to disability and childhood diseases, as well as to facilitate correct and timeous referral.
- To train CHWs to screen and refer patients, as well as to prevent disability by means of the correct management of chronic diseases.
- To prevent further disability through the provision of assistive devices such as the correct positioning of a child with cerebral palsy, preventing secondary complications and additional deformities (Bezuidenhout 2013: Personal communication; RuReSA 2011:10).

In order to establish positive interactions between CHWs and physiotherapists within the re-engineered PHC system, it will be of value to find out what the perceptions, attitudes and practices of employed CHWs are with regard to their role and interaction with physiotherapists within the field of health promotion and the prevention of illness. Perceptions, (Definition 1 see Chapter 3) attitudes (Definition 2 see Chapter 3) and practices (Definition 3 see Chapter 3) (Anderson 2014:262) determine how individuals view their roles in the workplace.

The significance of this study lies in the fact that this information could provide the basis of effective cooperation and referral between CHWs and physiotherapists who both play a central role in health promotion and the prevention of illness, as discussed above.

1.3 RESEARCH AIM AND PURPOSE

The main aim of this study was to determine the perceptions, attitudes and practices of CHWs in the Thabo Mofutsanyane district (Free State) with regard to health promotion and prevention of illness, as well as inter-professional referral or cooperation with physiotherapists related to this.

In realising the main aim of this study, the following research objectives were set:

1. To establish the perceptions, attitudes and practices of CHWs regarding their role in health promotion and the prevention of illness within the communities.
2. To establish the perceptions, attitudes and practices of CHWs concerning the role of physiotherapists in health promotion and the prevention of illness within the communities.
3. To establish the possibilities for interaction between CHWs and physiotherapists with regard to health promotion and prevention of illness.
4. To identify barriers and benefits to CHWs in fulfilling their role in health promotion and prevention of illness.

1.4 RESEARCH METHODOLOGY

1.4.1 Research Design

For this research study the researcher opted for a **qualitative research** approach, conducting focus group interviews to collect data. A set of unstructured, open-ended questions (Annexure A) was constructed beforehand, that allowed participants to answer from their own viewpoints. In addition, demographic information was collected by means of a short demographic questionnaire (Annexure B) to describe the population. Figure 1.1 below illustrates the research process by means of a flow chart.

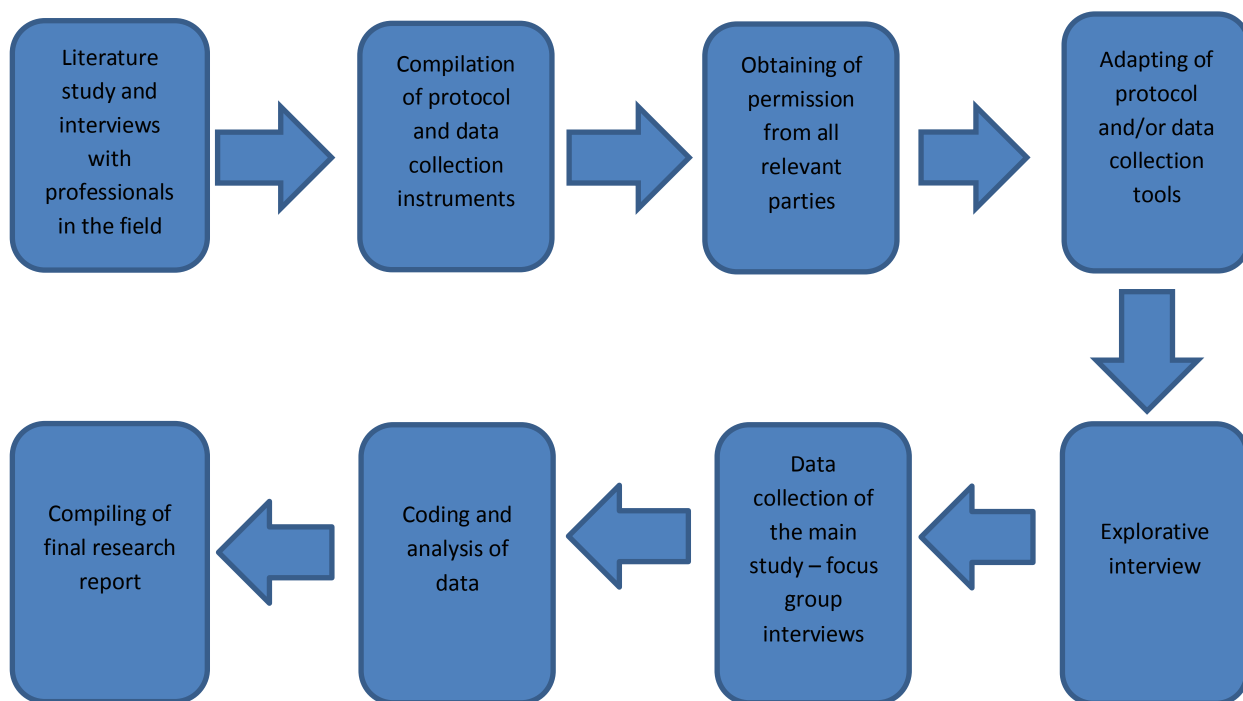


Figure 1.1: Research process

1.4.2 Study Population

The population for this study consisted of all the CHWs (31) in the Thabo Mofutsanyane district (Free State), which is one of the eleven RSA DoH selected districts to pilot the re-engineered PHC plan (Annexure C).

1.4.3 Unit of Analysis

Purposeful/purposive sampling was used, including the entire group of CHWs (3-12 per clinic) employed in the Thabo Mofutsanyane district.

Of the eleven piloted districts, the Thabo Mofutsanyane (Free State) district is situated closest to Bloemfontein and was thus selected for inclusion in the study, to limit costs and allow for time restrictions.

1.4.3.1 Inclusion Criteria

- CHWs contracted by the RSA DoH as part of the pilot project of the re-engineered PHC plan.
- CHWs working in the Thabo Mofutsanyane (Free State) district.
- CHWs from all races.
- CHWs of any gender.
- Written, informed consent to participate in the study was obtained.
- Afrikaans, English or SeSotho speaking participants.
- CHWs must have undergone a certain amount of training from the South African DoH.

1.4.3.2 Exclusion Criteria

- Health care personnel with formal training in nursing, medical or any other allied health professions.
- Alternative healers in these communities.
- Participants who failed to arrive for the focus group interview on the scheduled date.

1.5 COMPILATION OF THE DATA COLLECTION TOOLS

1.5.1 Demographic Questionnaire

The researcher developed a short demographic questionnaire to obtain information on, amongst others, the participants' age, gender and employment period as a CHW. This information was used to describe the population sample.

1.5.2 Focus Group Question List

The focus group question list was developed from information gathered during the extensive literature review and personal communication with professionals in the fields of community- and PHC (e.g. Professor Theresa Lorenzo and Dr Helen Schneider), as well as an expert on the re-engineering of the PHC system in SA (Dr M. Schoon with reference to the Free State).

1.6 DATA COLLECTION (MAIN STUDY)

1.6.1 Recruitment of Participants

The researcher contacted the clinic sister/registered nurse in each of the selected municipalities as a contact person in order to arrange the execution of the study. Times and dates were arranged and agreed upon for each of the municipalities and confirmation of each meeting followed a week after the initial telephone call.

One week prior to the arranged date that the study was to be performed the researcher re-confirmed the meetings with the sister-in-charge at each of the five clinics in order to secure participants.

1.6.2 Data Collection Procedure

The Thabo Mofutsanyane district has been divided into five smaller municipalities, each with a clinic and community health centre. It was confirmed telephonically that each of these clinics has a training room facility where the data collection for this study could be performed. The five sub-municipalities are: Setsoto, Dihlabeng, Nketoana, Maluti and Phumelela. Each municipality employs between 3 and 12 CHWs.
Figure 1.2 below illustrates the main steps in the data collection procedure. A more detailed description of this procedure is portrayed in Chapter Three.

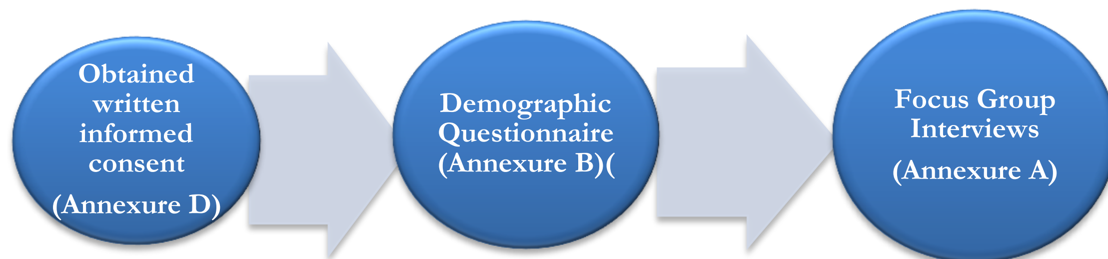


Figure 1.2: Main steps in the data collection procedure

1.6.3 Data Analysis

After the data collection and coding of the short demographic questionnaire had been completed, analysis of the data was done in cooperation with the Department of Biostatistics, UFS. The quantitative analysis included summarising results using percentages for categorical data and reported on by means of tables and graphs. Analysed data were interpreted and discussed by the researcher.

The data collected from the focus groups were transcribed verbatim by the researcher, coded by the researcher herself as well as a co-coder (Dr. Van Rhyn) and checked by an independent person. Qualitative data for this study were analysed by using the approach as described by Denzin and Lincoln (2011:285) as well as by Creswell (2009:185), sorting data into categories, sub-categories and themes.

At completion of the study conclusions were drawn, limitations identified and recommendations made in the final research report.

1.7 ETHICAL ASPECTS

Permission to perform the study was obtained from the relevant parties, including the DoH of the Free State province (Annexure E), as well as the Ethics Committee of the Faculty of Health

Sciences, UFS (ECUFS) (ECUFS NR 174/20134) (Annexure F) before commencement of the study.

1.8 IMPLEMENTATION OF RESULTS AND SIGNIFICANCE OF THE STUDY

The results of this study could be used to assist the DoH of the Free State to contribute towards and streamline the implementation of the re-engineered PHC plan in the communities, specifically referring to the areas of health promotion and the prevention of illness. It could also serve as the basis for further research into the effectiveness of the new proposed and currently piloted PHC programme in SA. Lastly, the results obtained could be a valuable resource to the RSA DoH to make positive recommendations regarding inter-disciplinary cooperation and referrals between specifically CHWs and physiotherapists within the re-engineered PHC plan.

The findings may furthermore be published in a peer-reviewed journal and/or presented to the RSA DoH.

1.9 OUTLINE OF DISSERTATION

In-depth information with regard to this research study will be included in the rest of this dissertation according to the outline below.

- Chapter Two - Literature control
- Chapter Three - Research methodology
- Chapter Four - Research findings
- Chapter Five - Discussion, limitations and recommendations and conclusion

1.10 CONCLUSION

This study acknowledges the importance of health promotion and prevention of illness in alignment with the proposed re-engineered PHC plan of the South African DoH and in recognition of the global trend of shifting health care to the communities. In addition, this study might further contribute to the existing body of knowledge, by determining the perceptions,

attitudes and practices of CHWs on their role and interaction with physiotherapists regarding health promotion and prevention of illness.

2. CHAPTER TWO: LITERATURE CONTROL

2.1 INTRODUCTION

The health care approach worldwide has recently shifted towards a more promotional and preventative one. Linking onto this theme of promotional and preventative health care, the DoH has proposed a new health plan to re-engineer PHC within SA that shifts the focus from hospitalisation to the management of health conditions at primary care level in the community (RSA DoH 2011:1). This new health plan also clearly provides for the inclusion of CHWs to assist with health care delivery in the community. The DoH of SA stipulates the central role of these CHWs as health promotion and the prevention of illness, specifically within the areas of maternal and child health, HIV, TB and chronic diseases (CMT 2011:7). This initiative also forms part of the NHI plan developed by the DoH in order to restructure the entire concept of health insurance and patient care within SA (RSA DoH 2011:1).

According to the WHO health promotion is "*the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being*" (WHO 1986:1). It is furthermore stated that the health promotion initiatives and programmes of various countries be adapted to suit the unique cultural, social and economic prerequisites of that particular society (WHO 1986:1). Such strategies aimed at health promotion is beneficial in the fact that these programmes draw the communities closer and enhancing a self-help concept and public participation, which, in turn, creates ownership within the community (WHO 1986:3).

Illness prevention describes an approach which does not only address all major common risk factors of cardiovascular diseases, diabetes mellitus, cancer and chronic respiratory diseases, but also the need to integrate primary, secondary and tertiary prevention, health promotion, and related programmes across the various health disciplines (WHO 2015:1). The most successful action for implementing a strategy of prevention is a community-based program. These interventions utilize education or environmental change to promote healthy lifestyles and behaviour changes needed to address a particular problem (WHO 2015:3).

Against this background, the literature control in this chapter will focus on the international and national views on PHC, the re-engineered PHC plan for SA (including the NHI plan), CHWs and their role in PHC, physiotherapy in health promotion, prevention of illness and PHC, as well as the interaction between CHWs and physiotherapists worldwide.

2.2 PRIMARY HEALTH CARE

At an international conference on PHC in Alma Ata, Kazakhstan in 1978, "Health for All" was introduced (Ncayiyana 2008:655). At the conference global health organisations and national governments committed to work together to achieve the common goal of providing all people with basic health care through an approach referred to as PHC (Ncayiyana 2008:655; Magawa 2012:1). According to the declaration of Alma Ata: "*PHC is essential care based on practical, scientifically sound and sociably acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation, and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination*" (WHO 1978:1).

PHC is thus the first level of contact for members of the community within the national health system, bringing health care as close as possible to where people live and work (WCPT 2011a:15). The success of any PHC system relies on people with health needs to have access to health services, the promotion of health, the prevention of illness and community participation (Magawa 2012:1).

2.2.1 An international view on PHC

Throughout the world, many countries have recognised the importance of preventative PHC. According to the WHO, countries like Mexico, Brazil, Cuba and China are but four examples of government driven initiatives that re-structured health care systems in order to offer rural and remote communities a better service in terms of health promotion and prevention of illness (Sepulveda *et al.* 2006:2022; WHO 2008:321; Hou 2009:9; Magawa 2012:1). In the United Kingdom, physiotherapy services are amongst the services included in the PHC package offered to the communities (Ishfaq and Lodhi 2012:373).

In 2001 the Mexican Ministry of Health launched the "An Equal Start in Life" programme which had the objective to reduce mortality rates through re-organisation of primary care in the most

affected areas (Sepulveda *et al.* 2006:2022). A system linking clinics and homes was established, referred to as "The Diagonal Approach", proving to be central to the process of reducing mortality rates in Mexico. The decline in mortality rates was, amongst others, linked to a significant improvement in the nutritional statuses of children and a marked decline in mortality rates related to diarrhoea. Polio, diphtheria and measles were no longer life threatening to the communities in Mexico either (Sepulveda *et al.* 2006:2022).

In Brazil, the federal government committed to financing a PHC system where free health care is available to every person with health needs (WHO 2008:248). At present, 70% of the population in Brazil receives health care from this initiative. Twenty seven thousand family health teams are active in the 5560 municipal districts, each serving an estimated 10 000 people (WHO 2008:248). In Brazil, PHC has thus managed to provide a more effective way to access large numbers of people in the communities (WHO 2008:249).

Cuba has also achieved great success in the areas of health promotion and prevention of illness by expanding its PHC coverage and in so doing, improving the overall health outcomes of the people (Magnussen *et al.* 2004:167). The Cuban constitution underwrites that health care is a right for all people and the responsibility of the government. In 1997 the American Association for World Health wrote a report stating that a humanitarian catastrophe had been averted due to Cuba's commitment to- and maintenance of a health care system that delivers preventative and promotional health care to all of its citizens (Magnussen *et al.* 2004:170). With a budget far smaller than many developed countries, Cuba has a life expectancy of 77 years and an infant mortality rate of 7.7 per 1 000 live births, which ranks this country amongst the 25 countries in the world with the lowest mortality rates (Magnussen *et al.* 2004:170).

Another country that has undergone major changes in health care is China, with 51.1% of its population living in rural areas and 41% living below the poverty level. Their health system relies heavily on PHC (Hou 2009:5). Despite the problems in their current health care system, such as high expenditure, unaffordable prices for consumers, lack of co-ordination and inefficiencies, China is committed to PHC. Facing all the challenges ahead, China announced its intention of establishing a universal health coverage system for all, emphasising the provision of quality PHC by 2020 (Hou 2009:9).

Prevention efforts in these countries mainly included neonatal screening, supplementation for women and the training of CHWs to assist in health promotion and prevention of illness (Sepulveda *et al.* 2006:2022).

CHWs have been playing a vital role in the PHC sector as can be seen by the Lady Health Workers in Pakistan, *behvarz* in Iran, *agentes communitários de saúde* in Brazil, BRAC community health workers in Bangladesh and the village health volunteers in Thailand. These CHW programmes have all contributed to successful health outcomes in the aforementioned countries (WHO 2013:1).

The benefits of CHWs within the PHC sector are stated by the WHO as

- CHWs who are properly trained, equipped and supported can take on a range of tasks that otherwise depend on mid-level health workers.
- CHWs extend care to underserved communities, where they enhance access to health services and promote people's trust, demand and use of such services.
- CHWs who speak the local language and identify with the local community convey health messages more effectively.
- CHW training and service contribute to capacity for community leadership.
- CHWs recruited from the communities they serve are less likely to go elsewhere because of difficult living conditions.
- CHWs can help service users avoid trips to health facilities, which translates into saved transportation costs and time.
- CHWs can meet some of the needs of homebound patients (WHO 2013:1).

2.2.2 An African view on PHC

PHC systems are found throughout the continent of Africa, but the need for such systems to be implemented even more widely is evident due to the growing burden of disease and small numbers of health workers in rural communities (Ayankogbe 2014:621).

The government of Tanzania set out to expand health facilities to rural areas with the emphasis on the prevention of illness (Kwesigabo *et al.* 2012:36; Magawa 2012:2). Much like in the case of SA, Tanzania faces similar challenges in terms of poverty, diminished physical and human resources and a high population versus available health care staff ratio (Kwesigabo *et al.* 2012:36).

In an attempt from the government to satisfy the needs of a rapidly growing population living in rural areas, people with health care needs were first attended to in their local village and from there referred to more specialised facilities. This system is known as the "Multi-tiered decentralised system" and operates in Tanzania to this day (Kwesigabo *et al.* 2012:36). Two or more health care workers are placed in a village and, after a brief training programme, these workers run the health care programme by promoting health and preventing illness by treating minor ailments in the homes of the people and referring people to the next level of assistance (qualified nurse), should the person require additional care. This initiative was characterised by a significant increase in CHWs and led to a substantial decrease in infant mortality rates (Kwesigabo *et al.* 2012:36).

In the 1980s, Mozambique, too, expanded its PHC strategy by means of a decentralisation programme that moved health management from provincial level to district level. District teams played a significant role in improving integrated health care (Sherr *et al.* 2013:2) and as a result, health indicators improved dramatically (Magawa 2012:2), except for the Sofala Province in central Mozambique which still suffers high mortality rates, despite a reduction in numbers over the past decade (Sherr *et al.* 2013:2). This could mainly be attributed to lacking prevention strategies, specifically regarding diseases such as HIV and TB, as well as maternal and child health. The accomplishments in Mozambique were the sum total of community involvement as well as a government vision to meet the health requirements of the citizens and to achieve increased economic equity (Sherr *et al.* 2013:2).

PHC was also actively implemented in Uganda, Zambia and Ghana and as a result of early screening and immunisation, a decrease in infant and child mortality rate was achieved (Magawa 2012:2). A randomised field experiment conducted in Uganda on community-based monitoring of public PHC providers showed that, after encouragement of communities to be more involved in health care service, CHWs rendered a more efficient service to the local communities, resulting in improved health outcomes such as decreased child mortality rates and increased child weight (Bjorkmann and Svensson 2009:735). Community involvement thus encourages participatory approaches in health care implementation that subsequently leads to improved health outcomes.

As can be seen by examples of PHC strategies implemented on the African continent, overall improvement of health outcomes was noted, with the central focus of these strategies being the promotion of health as well as the prevention of illness.

2.2.3 A South African view on PHC

Since the abolishment of *apartheid*, the new democratic government of SA embraced PHC as a certain solution to an increasingly high demand for health care to large numbers of people. Unfortunately these initiatives were not formally stated in their health policies, and as a result many of the CHW programmes collapsed (Van Ginneken *et al*. 2010:1110). With HIV, TB and many other diseases contributing to increased mortality rates in SA, the government was subsequently forced to re-evaluate and implement definite CHW projects to address the health needs of the bigger majority of people residing in SA (Van Ginneken *et al*. 2010:1110).

During the *apartheid* regime, health care was unevenly distributed, with only a few CHWs placed in areas of Zululand to assist in treating and combatting malaria [(MacKinnon 2001:76) last updated resource]. Many single-driven attempts at erecting clinics for the communities were initiated throughout SA since these malaria-aid clinics, yet, with little success, as these were commonly perceived by the local communities as being racialised and second-rate health care [(Marks 1997:452) aged reference included for historical relevance].

As the first democratic government saw the light in 1994, the district health system was adopted as the cornerstone of the new National Health Plan (NHP). Unfortunately CHWs were not part of this system and sadly this effort failed as many international donors withdrew their financial support (Friedman 2005:176). However, the underlying aim and focus of the government of SA remain to address the health needs of the under-served majority and to enable them to receive the health care and benefits they deserve, as was the driving force behind Alma Ata in 1978 (Van Ginneken *et al.* 2010:1116). Life expectancy has improved and infant mortality in SA has diminished since 2009, but given the HIV/AIDS and TB epidemics, chronic illness and poor maternal, neonatal and child health figures, great effort will have to be poured into programmes to prevent illness and promote health in the communities of SA (Mayosi *et al*. 2012:2029).

PHC services in SA are currently being re-engineered to focus on health promotion and prevention of illness, yet still ensuring that quality curative and rehabilitative services are rendered (RSA DoH 2011:23). These services are characterised by extensive community outreach and home-based services, in which CHWs play a key role (RSA DoH 2011:24). The re-engineering of PHC in SA is further supported by conclusive evidence showing great economic and health benefits with improvement in living environments and the promotion of healthy lifestyles, as well as by reducing illness in communities (Perez *et al*. 2013:147).

2.3 PHC RE-ENGINEERING IN SA

SA is not immune to the health challenges faced by other African countries (see *2.2.2*), as many of its people live in remote areas and suffer poverty. The situation is further worsened by the growing HIV/AIDS and TB epidemics, the on-going migration of health professionals (Clarke *et al.* 2008:681), the escalation of risk factors for chronic diseases and increased violence and accidents (Mayosi *et al.* 2012:2029). Although mortality rates have decreased as stated by Mayosi *et al.* (2012:2029), more people are living with disease. Vast numbers of people in SA are thus in desperate need of health care and assistance, much like the situation globally (see *2.2.1*) as well as in the rest of Africa (Clarke *et al.* 2008:681), increasing the demand on health care services.

The DoH aims to adjust the current health care system, affording quality health care to the communities that are currently underserved and thus improving health outcomes (RSA DoH 2011:1). The ideal model of re-engineering health care in SA is one that focusses on the entire population as opposed to individuals, preventing illness and promoting health that reaches communities, households and schools (Schneider 2012:15). The CHW initiative is seen as a possible solution to the human resource crisis in health in many low-income communities, (Clarke *et al.* 2008:681) as described in 2.2. As stated in *2.2.3*, CHWs are expected to render these services that are aimed at addressing the specific needs of the community, are cost-effective for the government and create a sense of ownership and responsibility within the community (Lehmann *et al.* 2004:3). The overall coverage of services is therefore expected to improve, as these workers will be more accessible and acceptable to the members of their communities (Lehmann *et al.* 2004:3).

2.3.1 Re-engineered PHC plan

The proposed re-engineered PHC plan is currently being implemented across the piloted districts of SA as three streams, namely:

- District clinic specialist teams. These teams are responsible for improving health outcomes for mothers, new-borns and children (RSA DoH 2012:5). Every district will have a senior obstetrician and gynaecologist, paediatrician, family physician; midwife, paediatric- and PHC nurse (RSA DoH 2012:5).
- Municipal ward-based PHC teams. CHWs are the key elements within this stream, taking health care to the local community and people's homes. There will be one or more PHC teams in each of the municipal wards in SA, comprising of a clinic sister or professional

nurse, environmental health and health promotion practitioners as well as CHWs (RSA DoH 2012:6). As mentioned previously, the task of these workers will be to promote health and prevent illness by means of interventions promoting the concept of a healthy community, a healthy family, a healthy individual and a healthy environment (RSA DoH 2012:6).

- School-based PHC teams. Mobile clinics will enable school nurses to provide preventative services as well as services promoting health, reducing health-barriers to learning and facilitating access to health services as needed to disadvantaged schools in the country (RSA DoH 2012:7). Services include health education and promotion (nutrition and exercise, hygiene, chronic illness, abuse and HIV/AIDS and TB counselling), learner assessments as well as screening including vision, speech and hearing tests (RSA DoH, 2012:7).

For the purposes of this research study, only the municipal ward-based PHC teams are included as it is the first phase of the roll-out of the proposed re-engineered PHC plan within SA.

2.3.2 Identified Districts in SA

The South African DoH identified 11 districts within SA, situated in every province, specifically those areas with large numbers of underserved communities (RSA DoH 2012:8).

Table 2.1: Identified pilot districts

District (population, 2012)	**Province**
OR Tambo (1 754 499)	Eastern Cape
Thabo Mofutsanyane (771 610)	Free State
City of Tshwane (2 520 435)	Gauteng
Amajuba (517 279)	KwaZulu-Natal
uMgungundlovu (1 071 606)	KwaZulu-Natal

Umzinyathi (517 806)	KwaZulu-Natal
Vhembe (1 312.197)	Limpopo
Gert Sibande (946 719)	Mpumalanga
Pixley ka Seme (192 572)	Northern Cape
Dr Kenneth Kaunda (905 675)	North West
Eden (567 993)	Western Cape

The municipal ward-based PHC teams will be rolled out in these identified districts, where CHWs will provide health care to members of the communities by taking services to their homes and addressing the needs as described in the introductory paragraphs of 2.3.

2.4 THE ROLE OF CHWs IN SA

SA has a long history of using lay members of the community to provide health care. CHW programmes have gained prominence since the 1980s in response to the inadequate provision of health services provided during the *apartheid* regime, and, although many perceived this initiative as second rate or below standard, the idea of utilising CHWs remain an integral part of health care as currently viewed by communities (Clarke *et al.* 2008:680).

As CHWs are members of a specific community and selected by the community itself, these workers are answerable to their communities for their activities and are supported by the health system. CHWs conduct services related to health care delivery and are trained in the context of the intervention, but have no professional education and have a shorter training period than professional workers (WHO 2006:5).

CHWs are responsible for educating the community on matters that affect their health and for providing information about risk factors, health promotion and illness prevention (Boutin-Foster *et al.* 2007:61).

These same principles with regards to CHWs are foreseen within the South African re-engineered PHC plan. Ward-based outreach teams will be implemented and will consist of a clinic sister or a professional nurse and a number of CHWs reporting directly to him/her (see *2.3.1*). Each ward-based outreach team will be responsible for approximately 1500 families. The number of teams will be determined by the population size and every CHW will be assigned approximately 250 families (Schneider 2012:15) as portrayed in Figure 2.1 below.

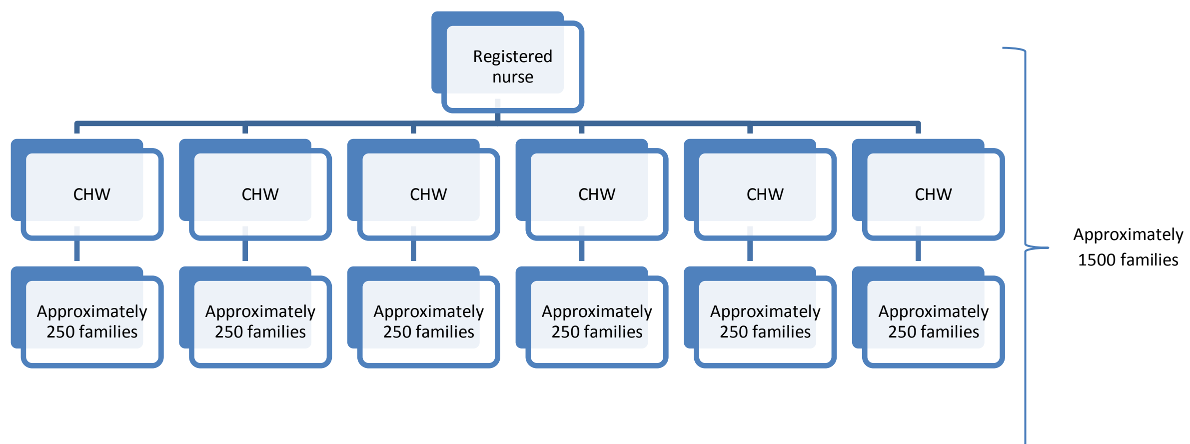


Figure 2.1: Proposed structure of a ward-based outreach team

The role of CHWs within the ward-based PHC team will be to:

- Identify and register households.
- Conduct household assessments.
- Promote health and prevent illness.
- Conduct a simple screen for potential health problems.
- Perform basic first aid.
- Give medication adherence support and counselling.
- Provide supportive counselling.
- Make and receive referrals to other health services (CMT 2011:7).

The scope of work of CHWs in the re-engineered PHC plan is to:

- Promote health and prevent illness.
- Conduct structured household assessments to identify health needs.
- Provide psychosocial support to community members.
- Conduct community assessments and mobilise around community needs.
- Identify and manage minor health problems.
- Support continuum of care through service co-ordination with other relevant health care providers.
- Support screening and health promotion programmes in schools (CMT 2011:8).

Great emphasis will thus be placed on how health in the community can be promoted and illness prevented when CHWs screen and assess households and support and counsel members of a community. Child, adolescent and women's health enjoy priority in an attempt to improve health outcomes. Referral to other health practitioners (including physiotherapists) also forms a major part of the responsibilities of CHWs.

2.5 CHW PROFILING

Given the fact that the South African DoH (2011:11) is funding the first phase of the appointment of CHWs, a fixed profile for the appointment of CHWs has been compiled. These requirements are also applicable to the pilot study (see 2.3) conducted by the government.

2.5.1 Selection and recruitment of CHWs

Standard practice for the appointment of CHWs in the greater parts of Africa simply imply that candidates reside in that particular community, speak and understand the local language and are familiar with the culture (Lehmann *et al.* 2004:7).

The South African DoH (RSA DoH 2012:10), however, requires applicants to meet the following conditions in order to be eligible for recruitment:

- Be literate and numerate (filling in the application forms themselves without assistance).
- Have completed some sort of training equivalent to a National Senior Certificate (NQF level 4).

- Have had at least one year's experience as a CHW (two years would be desirable).
- Have a recommendation from a previous employer.
- Live in the local community he/she wishes to serve.
- Be willing to undergo training and orientation as well as sign a performance appraisal.
- Undergo an assessment after phase one before the CHW will be eligible to sign up for phase two of training (RSA DoH 2012:10).

These clear requirements set out by the South African DoH might contribute to the successful selection and appointment of CHWs. Provincial governments are responsible for determining the number of ward-based outreach teams as well as their placements and posts. Vacant CHW positions will be advertised locally at non-profit organisations and health facilities (RSA DoH 2012:11). After recruitment and appointment of these CHWs (firstly in the piloted districts), the South African DoH would be responsible for their orientation and training. Mainly in-service orientation, training and skills development are foreseen for phases one and two in an effort to enhance the capacity of these workers (RSA DoH 2012:11). In phase three, the South African DoH aims to develop new additional qualifications and career paths for CHWs (RSA DoH 2012:11). CHWs will have their skills, knowledge and competencies assessed against the registered occupational qualifications using a "recognition of prior learning" (RPL) process (RSA DoH 2012:11), affording the CHWs the opportunity to advance their level of competence in order to fulfil all their functions. Table 2.2 below provides an outlay of the proposed South African DoH CHW orientation and training plan (CMT 2011:13-14).

Table 2.2: CHW orientation and training plan

Phase 1	Phase 1 Output	Time Frame
Orientation and training programme	• Orientate and train the 33 000 CHWs appointed to work in ward-based outreach teams. [10 000 CHWs will be trained in year one (at least 5000 by 31 December 2011 and 5000 by 31 March 2012) and 23 000 CHWs will be trained in year two (by 31 March 2013)]. • Competence assessment of CHWs trained and certificate of competence awarded to those found competent. • Skill development support programme will be put in place for those that do not meet the competence requirement.	Time frame: 2 Years (FY 2011-2012; 2012-2013)
Supervision, performance management, mentoring and coaching programme for outreach team leaders	Local level supervision and mentoring skills through: • Orientation and training of 6426 professional nurses to supervise, coach, mentor and manage performance of CHWs to acquire skills and competencies (Year one and two).	Time frame: 2 Years (FY 2011-2012; 2012-2013)
Phase 2	**Phase 2 Output**	
Consolidation of skills learnt in Phase 1 Introduction of protocols, guidelines and assessment and screening for: Prevention and management of chronic diseases	• Train 33 000 CHWs in phase 2 training programme. • Competence assessment of CHWs trained and certificate of competence awarded to those found competent. • Skill development support programme for those that do not meet the competence requirement.	Timeframe: 1 Year (FY 2013-14)

Prevention and management of trauma and violence Introduction to group-based interventions		
Phase 3	**Phase 3 Output**	
Focus will be on training that is aligned to registered occupational qualifications that will facilitate CHWs to attain the full range of competencies required for fulfilling the job of a CHW	Competence assessments of CHWs against occupational qualifications. Implement a vocational training programme for CHW to acquire the registered occupational qualifications [30% of CHWs to acquire vocational qualifications in year five of the programme, 50% in year seven and 70% in year eight).]	Time Frame: 4 Years Year 4 to Year 8 2014-15 to 2018-19

In response to this CHW orientation and training plan set forth by the South African DoH, the Strengthening SA's Revitalised Response to HIV and Health (SARRAH) group launched an investigation into the progress of ten of the eleven districts enrolled into the re-engineered PHC plan pilot study according to the time schedule as depicted above. Visits to these districts took place on 15-29 April 2013 (SARRAH 2013:10). Eden district in the Eastern Cape was not visited as this district had not implemented the ward-based outreach system yet.

Findings by SARRAH showed that only one district had a sufficient number of CHWs employed (as based on national standards) to perform a quality health service to the community, where the other districts varied between 8% and 61% (SARRAH 2013:17). Their report also stated that hardly any of the CHWs in these ten districts had received re-training in the PHC re-engineering. All districts had referral protocols drawn up and in place, but SARRAH suggested that referral

mechanisms be more effectively implemented to ensure optimal health outcomes (SARRAH 2013:25).

In the Thabo Mofutsanyane district in the Free State, it was found that only 11% of ward-based teams were operational, 28% of CHWs were in posts and none of the CHWs had been re-trained in the re-engineered PHC plan (SARRAH 2013:63). Besides the human resource shortages already highlighted here, a discussion on other barriers to CHWs performing their duties are included below.

2.5.2 Possible barriers to CHWs and health care delivery in communities

The management of key elements like technical support and supervision, transport, accountability, infrastructural support and financing are all imperative for the success of a community health programme (Lehmann *et al.* 2004:17), and a failure to address these factors will increase the risk of failure for the entire project (Nxumalo *et al.* 2013:219).

Where the community is concerned, possible barriers such as quality and availability of services might be highlighted, coupled with accessibility (Lehmann *et al.* 2004:17). Great care will have to be taken in order to avoid the label of "second-hand health care" like in the past (Marks 1997:452).

Success can also be influenced by the general health of a CHW. A study conducted in Cape Town has shown that CHWs face an increased risk of contracting illnesses such as TB with an even higher risk when the CHW is co-infected with HIV. This contributes to days off work and possible co-infection of patients (Kranzer *et al.* 2010:224).

On an international level, a study performed in rural communities in Peru found that ineffective communication and referral amongst CHWs affected the outcomes negatively, coupled with an unstructured referral system to other health professionals (Brown *et al.* 2006:4). The same study in Peru also stated that husbands disapproved of their wives becoming CHWs due to the fact that other male CHWs may work alongside them in health promotion activities. The study shows that those CHWs who did not receive continuous training and moral support were the first to drop out of the programme (Brown *et al.* 2006:4).

However, besides these barriers many benefits do exist for both CHWs and communities with the implementation of a community-based health care approach.

2.5.3 Benefits of CHWs and health delivery in communities

Literature states that the use of CHW programmes is assumed to be less expensive and adds a sense of self-reliance and local involvement (Lehmann *et al.* 2004:25). CHWs are expected to enhance the coverage of various services as well as equity in-service delivery, for example increased service availability to poorer members of a community (Lehmann *et al.* 2004:25).

The re-engineered South African PHC plan will thus aim to improve the cost effectiveness of health care by reaching larger numbers of previously under-serviced individuals with high-impact basic services at a low cost (Lehmann *et al.* 2004:25). The heavy burden of HIV/AIDS and TB on the health care system of SA means that a more cost-effective solution is welcomed within the South African context, where service delivery and accessibility would be more readily available.

With adequate support, training and supervision, the CHWs' roles would involve that of linking households and/or communities with the health care system, and thus increasing knowledge on health related issues (Schneider *et al.* 2008:185). In such a system, the referral to- and interaction between CHWs and other health care professionals (including physiotherapists) could positively contribute to the united goal of health promotion and the prevention of illness in order to prevent negative outcomes and barriers as experienced in Peru (mentioned in *2.5.2)* (Brown *et al.* 2006:4), where it was clearly shown that an ineffective referral system and non-communication between health care providers led to a collapse of the entire initiative. As physiotherapists could play an important role in the drive towards health promotion and the prevention of illness in the re-engineered PHC plan, the next section discusses physiotherapy and its role within health promotion and the prevention of illness.

2.6 THE SCOPE OF PROFESSION FOR PHYSIOTHERAPY

The WCPT defines physiotherapy as "*a service rendered to individuals in circumstances where their functions and movement are impaired by various factors*" (WCPT 2011:1a). Physiotherapy aims to optimise quality of life and factors relating to the areas of health promotion and prevention of illness, intervention and rehabilitation (WCPT 2011:1b Physiotherapists are also required to "*interact with other health professionals, families and caregivers and communities where goals are agreed upon, using skills and knowledge unique to physical therapists"* (WCPT 2011:1c).

According to the WCPT (2011:2) physiotherapists are qualified and professionally required to:

- Assess a patient or the need of a client group.
- Evaluate the findings obtained with the assessment.
- Formulate a diagnosis, prognosis and treatment plan.
- Consult within their expertise and determine when individuals need to be referred to another health care professional.
- Predict the outcomes of interventions.
- Give home care advice.

The scope of physiotherapy profession is not limited to direct patient care, but also includes:

- Service in public health settings.
- Supervising and delegating.
- Leading.
- Managing.
- Teaching.
- Research.
- Developing and implementing health policies.

As stated in the introduction (see 1.1), physiotherapy is also focussed on promoting health and preventing illness of individuals in the general public and community (WCPT 2011:2).

In SA, physiotherapists have first line practitioner status, diagnosing and treating patients as well as referring patients to other professionals as necessitated (SASP 2008:2). According to the HPCSA (1976:7), physiotherapists are equipped and expected to manage conditions in the fields of orthopaedics, neurology, respiratory, cardio-vascular, obstetrics, sports medicine, paediatrics, geriatrics, intensive care units and general rehabilitation. Community health care also falls within the scope of profession of physiotherapy in SA, and community health care includes services such as rehabilitation, health promotion and the prevention of illness.

Rehabilitation services in SA (including physiotherapy) are considered inaccessible to the large population of people living in rural areas, with the result that the poor often do not have the benefit of these services (SASP 2008:1). Physiotherapy, as stated before, forms an important part

of rehabilitation and therefore has to be included in the services rendered to communities as is seen in the United Kingdom (see *2.2.1)*.

The South African Society of Physiotherapy (SASP) has listed a few guiding principles for physiotherapy within a PHC system. These guidelines include aspects such as accessibility to physiotherapy, equity, affordability, availability, effectiveness, efficiency, community participation and inter-disciplinary cooperation (SASP 2008:4). The pillars on which physiotherapy is built regarding community health are prevention, health promotion, curative management, rehabilitation, research and education (SASP 2008:5).

2.7 THE ROLE OF PHYSIOTHERAPY IN HEALTH PROMOTION AND THE PREVENTION OF ILLNESS

The United Nations as well as the WHO have both emphasised the importance of health promotion and the prevention of illness for many years, aiming to ensure an international awareness amongst health care professionals to address these topics as a model of service provision (WCPT 2003:3). Primary prevention is defined as measures that are taken in order to prevent diseases, injuries or conditions that can result in impairments or disabilities (WHO 1995a:iv). These measures would include health education, maternal and child health services and the promotion of safety, which all form part of community health care. The WHO (1995a:ii) clearly states that physiotherapists, along with all other rehabilitation personnel are crucial in the prevention of illness and have a valuable contribution to make in this area. Countries in South Eastern Europe have embraced this vision of the WHO and have implemented various strategies to enhance the role of physiotherapists in health promotion and the prevention of illness (Kosevska *et al.* 2007:177).

Macedonia is a relatively small country in Eastern Europe which also faces many health challenges, similar to those in other poorer countries where solutions were sought to expand and improve health care. The government of Macedonia embarked on a health reform strategy where key aspects were identified that could improve health care. One of these aspects was to improve the physical activity of the population by incorporating rehabilitative services as part of the intervention plan (Kosevska *et al.* 2007:177). Physiotherapists embarked on the training of rehabilitation teams with regards to this. Other aspects were to improve the health management of the people by providing basic education about health promotion and prevention of illness (Kosevska *et al.* 2007:177).

The American Physical Therapy Association (APTA) also strongly advocates the role of physiotherapists in promoting health and preventing illness (APTA 2011:52). According to the mission statement of APTA, physiotherapists have a great contribution to make towards a dynamic health care system, primarily in the areas of health promotion and illness prevention, specifically in educating the community on health and disability issues.

Like SA, the Canadian Association of Physiotherapy defines "physiotherapy" as a health profession that includes the promotion of individuals' and populations' wellness by promoting overall health and preventing injury, disease and disability (Canadian Physiotherapy Association 2012:1). The definition according to this association does not exclude the curative aspect of physiotherapy, but in addition simply recognises the preventative benefits which line up with this study. According to the Ontario Physiotherapy Association, physiotherapists make a vital contribution towards improving the quality of life of a given community by improving the general health outcomes of such a community, managing expenses and contributing to the team effort along with other health disciplines (Ontario Physiotherapy Association 2013:2).

Due to the growing burden of disease worldwide, a paradigm shift in the role that physiotherapists play has been imminent. From a predominantly curative approach in the years with the polio epidemics and post-war rehabilitation, the direction of the physiotherapy profession now aims towards a broader self-help initiative (Ontario Physiotherapy Leadership Consortium 2012:391), which lines up with the driving force behind the re-engineered PHC plan as initiated by the South African DoH.

The Chartered Society of Physiotherapy in Nigeria also emphasised the important role of physiotherapy in the public health agenda through its contribution to disease prevention and the promotion of good health, especially in improving physical activity and quality of life (Igwesi-Chidobe 2012:2). Limitations identified within the physiotherapy profession in Nigeria, were aspects such as improper referral practices, minimal awareness of other health care professionals of the scope of physiotherapy, poor teamwork and interference of traditional healers (Igwesi-Chidobe 2012:2).

The SASP has linked onto the global theme of health promotion and prevention of illness and clearly states in their code of conduct that these areas are imperative for better health outcomes (SASP 2011:2). Within their scope of profession, physiotherapists are trained in a preventative, rehabilitative role and are adaptable to various health care venues, such as rural villages and the homes of patients (Ontario Physiotherapy Association 2013:5). Besides managing musculo-skeletal, neurological and cardio-respiratory conditions as mentioned in 2.6 (HPCSA 1976:7),

physiotherapists also play an important role in managing chronic diseases as well as in preventing illness and/or injury (Ontario Physiotherapy Association 2013:5). Examples of such chronic diseases are:

- Diabetes.
- Arthritis.
- Chronic musculo-skeletal conditions e.g. low back pain, hip and knee pain.
- Obesity.
- Incontinence.
- Stroke.

2.8 PHYSIOTHERAPY IN PHC

The Australian Physiotherapy Association (APA) also defines the role of physiotherapists in PHC as that of health promotion, illness prevention and community development (APA undated:2). PHC, as seen countless times in literature, involves mainly health promotion and prevention of illness, and is best administered by a multi-disciplinary team (Doggett 2007:16). Such a multi-disciplinary team should typically consist of general practitioners, nurses, allied health professionals (e.g. physiotherapists) and CHWs (Doggett 2007:16). Health outcomes are improved because of expert contributions when professionals share the planning of patient care (Canadian Pharmacists Journal 2007:5).

A study by Cott *et al.* (2004:11) found that where physiotherapists were integrated into the multi-disciplinary team in PHC, the following results were seen:

- Increased levels of satisfaction by patients and physicians.
- Decreased waiting time.
- Increased cost effectiveness.
- Reduced numbers of referrals to specialists.
- Improved health outcomes for patients.

According to the WHO (1995a:ii) there is a marked need of physiotherapists in rural and community settings in developing countries, as these therapists are mainly located in national or provincial centres. In accordance with the re-engineered PHC plan of SA, this situation has to

reverse and henceforth physiotherapists are to be placed within the PHC setting (RSA DoH, 2011:1). By delivering a service to the communities, physiotherapists are sharing their knowledge and skills to empower families and community members, preventing possible illness and disease and promoting health (WCPT 2003:21).

The WCPT (2003:21) stipulates the responsibilities of physiotherapy in PHC as follows:

- Prevent disability and deformity.
- Educate/train disabled people to move around.
- Promote self-care.
- Educate/train and transfer skills to other staff.
- Consult, advise, support and supervise other health care personnel.
- Promote health and prevent illness.
- Provide curative and rehabilitation services.
- Lead and manage a team.
- Provide direct care.
- Advocate for disabled people, local communities and the profession.
- Inform governments, Non-Governmental Organisations (NGOs) and the local communities on establishing community based rehabilitation programmes.

In order for physiotherapists to perform these tasks within the PHC system, they would have to be flexible and innovative and be able to adapt to the circumstances in a given situation. O'Toole and McConkey (1998:311) suggest that these skills should be incorporated into the basic training curriculum of physiotherapists.

Many countries around the world are implementing PHC services, placing a team of health care professionals in the communities and building service delivery around these teams to promote sustainable health outcomes [(Ireland Department of Health and Children 2001:7) last updated resource]. Physiotherapists are part of these primary care teams and work inter-professionally with general practitioners, nurses, occupational therapists, social workers and an administrator to deliver high quality, team-based services to the public. The primary care team will also enjoy the benefit of support from each other regarding challenges faced within the community.

Physiotherapists have similarly successfully entered the PHC setting in countries like England, Scotland, Wales, the Netherlands, Sweden and Norway (Physiotherapy Alberta 2011:1). The

Canadian Physiotherapy Association says in their position statement that physiotherapists play an essential role in the delivery of PHC to Canadians and their communities (Canadian Physiotherapy Association 2012:1). Responsibilities of Canadian physiotherapists in PHC include the diagnosis and treatment of acute and chronic illnesses within the scope of practise, management of people with chronic disease, education in self-management as well as health promotion and injury prevention drives. Research development and multi-disciplinary interaction are also greatly encouraged in the hope of expanding the scope and range of the profession of physiotherapy in Canada (Canadian Physiotherapy Association 2012:2).

Although physiotherapy plays an important role in the PHC systems of many countries, a study that was conducted in a rural village in South-eastern Nigeria found that the majority of people in rural communities have never been exposed to physiotherapy treatment or rehabilitation in their lives. They frequently visit the chemist or use home remedies for their functional impairments. The members of these communities seldom visited tertiary health facilities and only one patient was ever referred for physiotherapy (Igwesi-Chidobe 2012:4). This emphasises the lack of knowledge and referral status for physiotherapy in these rural areas in Nigeria. Over four-fifths of the respondents had never heard of physiotherapy and no physiotherapy service is available at PHC level. The general attitude was that disease and impairment are a part of life and people simply learn to live with their conditions (Igwesi-Chidobe 2012:6).

A study conducted in two provinces in SA (one urban and the other rural) showed that the majority of physiotherapists as well as physiotherapy assistants agreed that physiotherapy plays a major role in promotive, preventative, curative and rehabilitative health care (Maleka *et al.* 2008:2).

2.9 PHYSIOTHERAPY AND RE-ENGINEERED PHC IN SOUTH AFRICA

In SA the PHC approach is the basis for the re-engineering of health care in the country and will play an integral part in social and economic development of the community (SASP 2008:2). Physiotherapy is an enormous component of rehabilitation, which in turn is central to the services rendered at PHC level. Physiotherapy management in PHC in SA is based upon four pillars namely promotive, preventative, curative and rehabilitative care (SASP 2008:2).

Many of the causes of morbidity and mortality in countries like SA are associated with preventable diseases. Physiotherapists assist in educating communities at PHC level about health

issues (SASP 2008:4), such as chronic illness and the early detection of conditions by means of early diagnosis and screening services. This, in return, plays an important role in the empowerment of communities with regards to their health. After illness or disability, it is also expected of physiotherapists in SA to assess the client in their home environment, rehabilitate that person to a functional level and integrate the client within the community (SASP 2008:5).

Although physiotherapy makes a large contribution towards the facet of rehabilitation, this service unfortunately also faces the barrier of small numbers of therapists who have to render a service to a large population who are unable to travel to their local clinics or district hospitals. As yet, physiotherapists are not formally included in the ward-based outreach teams (see 2.3) who assist and support CHWs in the communities, and therefore much of these rehabilitative services that physiotherapy has to offer are lost. The only health care offered to members of the community in their homes is that offered by CHWs through the ward-based outreach teams (see Figure 2.1).

South African physiotherapy graduates are all enrolled into a year of community service after their four year degree programme. This initiative is aimed at taking the service of physiotherapy into the communities of SA and building a platform for effective and efficient PHC, exposing members of the communities to promotive, preventive and rehabilitative services rendered by physiotherapists. Although new physiotherapy graduates are given a measure of community exposure, no formal guidelines or structures have been implemented as yet on how CHWs within the re-engineered PHC plan and these community physiotherapists could work together and take health care to the homes of the people as a combined effort which can offer members of the communities the best possible service.

RuReSA has submitted a description of the role of physiotherapists in the re-engineered PHC plan to the DoH, with specific regard to health promotion and the prevention of illness. The following services were identified:

- To give support in the areas of: antenatal care; postnatal care; the parents of children with disabilities and/or cerebral palsy; mental health and depression; chronic diseases; disability and the aged.
- To increase community awareness with regard to disability and childhood diseases, as well as to facilitate correct and timeous referral.
- To train CHWs to screen and refer patients, as well as to prevent disability by means of the correct management of chronic diseases.

- To prevent further disability through the provision of assistive devices such as the correct positioning of a child with cerebral palsy, preventing secondary complications and additional deformities (Bezuidenhout 2013: Personal communication; RuReSA 2011:10).

2.10 THE INTERACTION OF CHWs AND PHYSIOTHERAPISTS

Jeffries and Chan (2004:210) describe the term multi-disciplinary team working as "*The main mechanism to ensure truly holistic care for patients and a seamless service for patients throughout their disease trajectory and across the boundaries of primary, secondary and tertiary care*".

As physiotherapists are globally considered a part of the multi-disciplinary team, specifically in PHC, they have much to offer CHWs in terms of their scope of practise and expertise when a combined effort is made to share goals and ideas. This could further be supplemented with continued educational opportunities and support to the benefit of the communities.

As stated earlier (see 1.1) the South African DoH has a clear vision for CHWs to be actively involved in the promotion of health and the prevention of illness. The scope of the profession of physiotherapy also echoes the involvement of physiotherapists in these areas (see 1.1) (HPCSA 1976:7). Literature shows that the interaction of CHWs and members of the multi-disciplinary team (including physiotherapists) contributed to an effective outcome in community health in Brazil (Pinto *et al.* 2012:70). Similar conclusions were drawn in countries like Ireland, New Zealand and Australia (Loures and Silva 2010:2155). The WHO promotes that health care professionals and CHWs work together, integrating services for successful health outcomes for the communities (WHO 2006:322). A possible challenge in the cooperation of physiotherapists and CHWs could be in the merging of traditional and western expectations and treatment methods [(Van der Geest *et al.* 1990:1025) dated resource incorporated for relevance]. Traditional methods could be rejected by the community as the methods could be perceived as a lower form of health care, (see *2.2.3*) whereas some communities may refuse to embrace the treatment and rehabilitation methods of physiotherapists. In Australia the integration of physiotherapy in the community health care set-up is however considered the key to successful PHC (Loures and Silva 2010:2155).

The WCPT is in agreement with the abovementioned statements as it supports collaboration across professions and health sectors, enabling a better health outcome (WCPT 2011c:1). The

study conducted in a rural village in Nigeria as mentioned in section 2.7 above, revealed that CHWs did not refer clients in need of rehabilitation for physiotherapy, because they had no knowledge of the role and scope of the profession, or how physiotherapists could assist in the management of conditions (Igwesi-Chidobe 2012:6). This can be considered as one of the biggest obstacles regarding efficient delivery of PHC to the communities in developing countries. The researchers strongly recommended that CHWs in Nigeria should be educated on the scope of profession of physiotherapy, and physiotherapists should, in turn, be made aware of the tremendous need for physiotherapy services existing in rural areas throughout Nigeria (Igwesi-Chidobe 2012:7). A study conducted in South Africa amongst newly qualified physiotherapy graduates who were doing their year of community service, revealed that these graduates found a great need for collaboration with CHWs and that physiotherapy services performed in isolation were simply ineffective (Mostert-Wentzel *et al.* 2013:19). It was recommended that physiotherapy students receive training and exposure to the cadre of other health care personnel as part of their undergraduate curriculum.

2.11 CONCLUSION

Against the background of the involvement of CHWs and physiotherapists in PHC programmes worldwide, as well as the interaction between CHWs and physiotherapists within these programmes, the importance of establishing the perceptions, attitudes and practices of CHWs with regard to their role and interaction with physiotherapists regarding the promotion of health, and the prevention of illness within the re-engineered PHC system is imperative.

3. CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter featured an overview of literature relevant to this study. In this chapter the research approach and methodology will be discussed. A qualitative design was used to explore CHWs' perceptions, attitudes and practices on their role and interaction with physiotherapists regarding health promotion and prevention of illness.

The Oxford Dictionary describes the meaning of the term ***perception*** [Online 20151a:1 of 1] (Definition 1) to be the method in which a phenomenon is regarded, understood or interpreted.

The term ***attitude*** (Definition 2) is defined as a settled way of thinking or feeling about a phenomenon (Oxford Dictionary [Online: 20151b:1 of 1]).

In this research study the term ***practice*** (Oxford Dictionary [Online 2015:1c:1 of 1]) (Definition 3) will refer to the customary, habitual, or expected procedure or way of doing something.

The strategy of enquiry, aim and objectives of the research study, the study design and the unit of analysis, as well as the procedure that was followed to collect and analyse the data will be explained.

This research study was underpinned by a **grounded theory** approach where data are gathered, analysed and then brought into context with current existing literature. Finally new theories are formulated by integrating pre-existing literature and the findings of the research study [Nieuwenhuis (in Maree 2007:77)].

3.2 RESEARCH PARADIGM

The research paradigm for this study lines up with an interpretivism (constructivism) approach which, as described by Creswell (2008:6), focusses on the understanding of the various opinions of multiple participants, after which theories can be generalised. With this paradigm the researcher investigates all the viewpoints, using open-ended questions by means of interviews (Creswell 2008:8). The research paradigm for this study was based upon the referral to ontology and epistemology, concluding with the research methodology (Botma *et al.* 2010:40).

3.2.1 **Ontology**

The process of ontology deals with how the researcher viewed the phenomenon that was studied and what reality was perceived to be (Botma *et al.* 2010:40). Each individual has his/her own belief of what reality is, and ontology explains this reality as seen by the researcher.

In this study, an extensive literature review contributed to the researcher having her own perception and view of the research topic, focussing on aspects related to the perceptions, attitudes and practices of CHWs and their role in health care delivery within communities, before the data collection process commenced. In acknowledging the motivation behind the re-engineered PHC plan, as well as the tremendous need within communities throughout SA, the researcher was influenced to an extent where she felt hopeful and positive about the planned intervention that was being executed in the piloted districts. Literature further convinced the researcher of all the benefits of PHC ward-based outreach teams and how greater accessibility and accountability could improve health care in the communities (see Chapter 2).

The researcher also conducted the focus groups and collected data with the pre-knowledge of barriers and challenges that presented themselves in countries like Nigeria where PHC was implemented. This contributed to the researcher almost scanning or searching for any of these and other context-specific barriers as the interviews were conducted.

The value of this study is highlighted against the background that the researcher's view (ontology) is merged and viewed in the context of the CHWs' view. Valuable contributions are thus made from understanding the perceptions, attitudes and practices of CHWs (as collected during the focus group interviews) as they view their world, in their natural setting and within their own context, as each individual's experience is unique to him/her and every person acts according to his/her own interpretation of reality.

3.2.2 **Epistemology**

Epistemology deals with the matter of how knowledge was formatted or gained and this will explain why individuals react in certain ways (Botma *et al.* 2010:40). For this study the researcher listened to what CHWs said and interacted with them (during focus group interviews) within their natural setting in order to gain a better understanding of their experiences.

Through asking open-ended questions and interacting with participants, the researcher gained insight into the daily experiences of CHWs as they shared their views, allowing the researcher to

make sense of the participants' information and knowledge. The integration of the important aspects from the philosophical assumptions of ontology and epistemology ultimately culminated in the effective use of the research methodology in order to most effectively address the research aims and purpose.

3.2.3 Methodology

Methodology is the method that the researcher chose to conduct the research (Botma *et al.* 2010:40).

When focus group interviews are conducted as data collection method, participants gather for a group discussion, guided by a facilitator to discuss a pre-selected topic in order to, like in this study, obtain a rich array of data of the "perceptions, attitudes and practices" of the group (Skinner 2008:318).

When conducting focus group interviews the researcher asks open-ended questions and acts as the data collection instrument. As data collection instrument, the researcher thus acts like a magnifying glass that expands and explores the richness of everyday experiences by the group within the dynamics of the group through encouragement of participants to share their views and convictions about the topic (Ivankova *et al.* in Maree 2010:265). Focus groups are considered more advantageous in certain types of research studies as they often provide richer data as opposed to that collected by individual interviews and/or observations (Denzin and Lincoln 2011:559). Greater interpretation is also often seen when the synergy and dynamics of a group of individuals who share a common interest are studied, as memory and expression are not merely recalled by an individual, but by an entire group (Denzin and Lincoln 2011:559). Relational positioning of the group members further adds value to the data when the researcher has the opportunity to observe how members respond to one another within the focus group (Denzin and Lincoln 2011:559). As participants thus perceive more "ownership" over the discussions, the researcher almost takes a back seat as dialogue and interaction between participants take place.

All participants are encouraged to voice their opinions and to participate in the discussion which leads to valuable data that cannot be obtained through other methods of data collection (Nieuwenhuis 2007:100). Unfortunately there are a few negative aspects to consider with focus group interviews, for instance the effect of intimidation by a stronger, more opinionated participant that may prevent other participants from speaking freely (Skinner 2008:320). The

facilitator will in such cases strive to maintain a healthy balance between adequate control of the group and freedom of expression (Nieuwenhuis 2007:100).

One of the most characteristic features of focus group interviews is the fact that oral data as well as observational data are combined and the interaction of participants within the group context in a limited time span is often perceived as one of the greatest advantages of this data collection method (Babbie and Mouton 2011:233). In order to increase the credibility of the data, it is recommended that the researcher makes use of an assistant to take notes and record observations (Nieuwenhuis 2007:101) which would be viewed numerous times within the transcription process. Focus groups are also considered to have high face validity and therefore often preferred as data collection method if interventions are planned for a certain population (Fitzgerald *et al*. 2010:290).

Knowledge gathered from within focus groups, with the researcher as an "insider", performed in the natural setting of the participants is ideal for research of interpretive nature (Botma *et al*. 2010:40) and therefore utilised as such in this study.

3.3 RESEARCH AIM AND PURPOSE

The main aim of this study was to determine the perceptions, attitudes and practices of CHWs in the Thabo Mofutsanyane District (Free State) with regard to health promotion and prevention of illness, as well as inter-professional referral or cooperation with physiotherapists related to this.

In realising the main aim of this study, the following research objectives were set:

1. To establish the perceptions, attitudes and practices of CHWs regarding their role in health promotion and the prevention of illness within the communities.
2. To establish the perceptions, attitudes and practices of CHWs concerning the role of physiotherapists in health promotion and the prevention of illness within the communities.
3. To establish the possibilities for interaction between CHWs and physiotherapists with regard to health promotion and the prevention of illness within the communities.

4. To identify barriers and benefits for CHWs in fulfilling their role in health promotion and the prevention of illness within the communities.

3.4 STUDY DESIGN

The research design for this study was of a qualitative nature, as it provided the opportunity to embark on a process of inquiring to understand the specific topic or situation better. Creswell (2013:38-40) states that, within the paradigm of qualitative research, the researcher develops a complete picture where words, reports and feedback from informants are analysed, using a natural setting to perform the study. In qualitative studies, the research questions are broad, aiming to capture the participants' experiences or feelings regarding a certain topic, unlike quantitative research where the focus is mainly on numerical data to answer the research question(s) (Creswell 2013:38-40).

Another unique characteristic of qualitative research is the fact that the researcher becomes a part of the world or phenomena he/she is investigating. An entire new world unfolds as the researcher interprets phenomena by using an interpretive approach to the topic (Denzin and Lincoln 2011:3). A wide range of empirical materials could be explored (interviews, case studies, life stories) in order to enlighten the world about a certain occurrence, event or phenomena in people's lives (Denzin and Lincoln 2011:4). This interpretive approach afforded the researcher the opportunity to become a part of the CHWs' world and investigate their perceptions, attitudes and practices with regard to their role and interaction with physiotherapists within the fields of health promotion and prevention of illness, in order to gain a fuller understanding of this topic.

Focus group interviews (with the transcripts from these interviews) is a technique characterised by well-planned, structured or unstructured questions in order to obtain rich, concentrated data from different viewpoints in order to arrive at self-disclosure amongst the unit of analysis [Creswell 2009:75; Ivankova *et. al.* (in Maree 2010:265); Nieuwenhuis (in Maree 2007:81)].

This technique of data collection was chosen for the value it adds to the in-depth study required to explore the perceptions, attitudes and practices of CHWs regarding various aspects that extend beyond statistical boundaries.

The strength of focus group interviews lies in the fact that the researcher is able to use multiple sources of data to gain a deeper insight into what participants experience, not only their words, but also within their natural setting.

In addition to the predominant qualitative research design, participants also completed a short demographic questionnaire, which added a small quantitative component to the study.
The focus group interviews formed an important step in the research process, as indicated in the paragraph below.

3.5 RESEARCH PROCESS

The research process for this study is included in Figure 3.1 below, outlining the most important steps followed during this process. This represents the process from the initial stages such as the literature control, concluding with the final stages namely finalising the research dissertation.

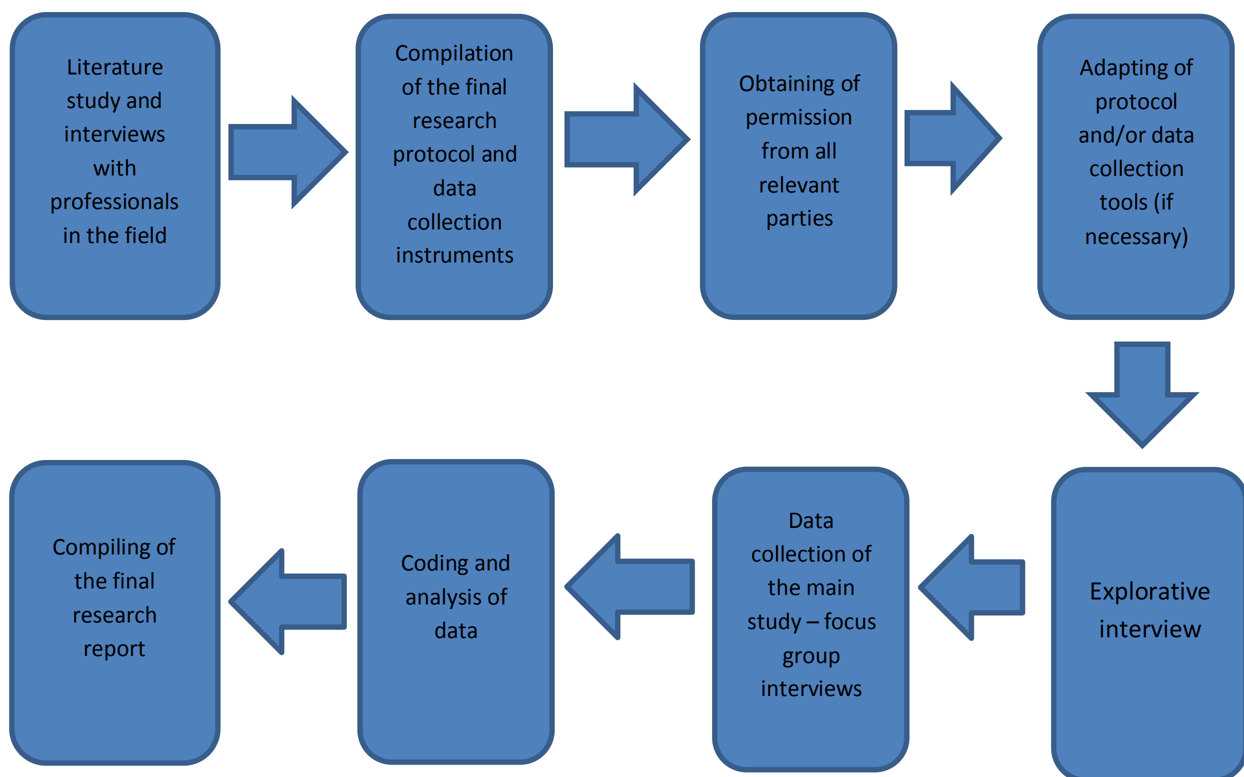


Figure 3.1: Research process

3.6 STUDY POPULATION

The South African Minister of Health identified eleven districts in SA where the re-engineered PHC plan is currently being piloted, having taken effect from 1 April 2012 (RSA DoH 2011:3). The pilot sites focus on the most vulnerable sections of society across the country, aiming to

reduce the high maternal and child mortality rate through district-based interventions, and strengthen the performance of the public health system in preparation for the full implementation of the new re-engineered PHC plan (RSA DoH 2011:3).

The pilot sites aim to assess whether the re-engineered PHC plan, PHC ward-based outreach teams and strengthened referral system will improve access to quality health services, particularly in the rural communities of SA (RSA DoH 2011:4). Additional objectives of the government are to test the ability of the districts to assume greater responsibility regarding community health care, as well as to evaluate the affordability of implementing such a health care service package (RSA DoH 2011:4).

The RSA DoH (2011:7) has announced the eleven districts included in the pilot studies as: OR Tambo (Eastern Cape), Gert Sibande (Mpumalanga province), Vhembe (Limpopo province), Pixley ka Seme (Northern Cape), Eden (Western Cape), Dr. K Kaunda (North West), Thabo Mofutsanyane (Free State), Amajuba (Kwazulu Natal), uMzinyathi (Kwazulu Natal), uMgungundlovu (Kwazulu Natal) and Tshwane (Gauteng). This selection was done based on a range of indicators, including health service performance, socio-economic factors and financial resource management (RSA DoH 2011:7). The National Treasury has allocated R1-billion for this project (RSA DoH 2011:5).

Of the eleven piloted districts, the Thabo Mofutsanyane (Free State) district is situated closest to Bloemfontein and was thus selected for inclusion in this study. The motivation for selecting this district is to accommodate costs and allow for time limitations. The Thabo Mofutsanyane District has been divided into five smaller municipalities, each with a clinic and community health centre. The five sub-municipalities are: Setsoto, Dihlabeng, Nketoana, Maluti and Phumelela. Each municipality employs approximately 12 CHWs, except the Phumelela municipality that only has three CHWs in its service.

The Nketoana municipality was selected for the explorative interview as this was the first clinic that responded to the request to participate in the study, after which the remaining four municipalities participated in the main study. As nothing was added or altered after the explorative interview, data from this municipality were included in the data analysis of the main study.

The study population for this study thus consisted of **all** the CHWs in the Thabo Mofutsanyane district (Free State), which is one of the eleven RSA DoH selected districts to pilot the re-engineered PHC plan (Annexure C).

3.7 UNIT OF ANALYSIS (STUDY SAMPLE)

Purposeful/purposive sampling was used including the entire group of CHWs (3-12 per clinic) employed in all five the clinics in the Thabo Mofutsanyane district (one clinic during the explorative interview and the remaining four during the main study). This was in line with recommendations from literature stating that between three and five focus group interviews should be conducted in a research study (Nieuwenhuis 2007:100).

3.7.1 Inclusion Criteria

- CHWs contracted by the RSA DoH.
- CHWs working in the Thabo Mofutsanyane (Free State) district.
- CHWs from all races.
- CHWs of any gender.
- Written, informed consent to participate in the study was obtained.
- Afrikaans, English or SeSotho speaking participants.
- CHWs must have undergone a certain amount of training by the South African DoH.

3.7.2 Exclusion Criteria

- Health care personnel with formal training in nursing, medical or any other allied health professions.
- Alternative healers in this community.
- Participants who fail to arrive for the focus group interview on the scheduled date.

3.8 COMPILATION OF DATA COLLECTION TOOLS

The researcher developed a short demographic questionnaire to obtain information on details such as the participants' age, gender and employment period as a CHW (Appendix B). This information was merely used to describe the population sample.

The focus group question list (Appendix A) was developed from information gathered during the extensive literature review and personal communication with professionals in the fields of community health and PHC (e.g. Professor Theresa Lorenzo and Dr Helen Schneider), as well as the re-engineering of the PHC system in SA (Dr. M. Schoon with reference to the Free State – as only the piloted district in the Free State was to be included in this study). The focus group questions were also presented to qualitative research experts (Professor Annette Wilkinson and Dr. L van Rhyn) to give input as to whether all aspects pertaining to the study aim and purpose were considered, before the question list was finalised. These actions assisted in determining whether all the relevant aspects regarding health promotion and the prevention of illness related to the role of CHWs and interaction with physiotherapists in the re-engineered PHC plan, were addressed.

Additionally to the set focus group question list, the researcher used probes such as: "*Please tell me more*", "*Could you explain what you mean by…*" and "*Can you tell me something about…*" during the focus group interviews in order to clarify what the participants said, as well as to obtain additional information relevant to the questions asked.

Questions for both the questionnaire and focus group interview were only available in Afrikaans, English and SeSotho (translated by a professional translator from English into Afrikaans and SeSotho) as these were the common languages spoken in all the municipalities in the Thabo Mofutsanyane district.

3.9 DATA COLLECTION

3.9.1 Recruitment of participants

The researcher approached the sister-in-charge/registered nurse in each clinic in the selected district as a contact person and contacted him/her telephonically, supplying all the contact details and specifications of the study. The researcher arranged dates and times where CHWs gathered at their specific health clinics in order to participate in the focus group interviews. One week before the study was to be performed the researcher confirmed with the sister-in-

charge/registered nurse to assist in having all the available CHWs in that particular municipality present at the specified time as agreed upon.

3.9.2 Data Collection Procedure

At every clinic the sister-in-charge provided a room with enough seating for all the participants where the information session (during which the value and aims of the study were explained to CHWs) and focus group interviews could be conducted. Absence of a participant on the day of data collection was regarded as part of the exclusion criteria. The demographic questionnaire, information document as well as the informed consent document was available in English, Afrikaans and Sesotho. A SeSotho speaking interpreter (lay person) was on hand to interpret the focus group questions and assisted with any explanations, if needed. Written informed consent was obtained from each participant, (Annexure D) signifying voluntary participation after all relevant information had been given to each member. It was ensured that each participant understood his/her rights, as well as that his/her identity was protected.
The entire sample group completed the short demographic questionnaire (Annexure B) before commencement of the focus group interviews. Upon completion of the demographic questionnaire, participants were again informed that the rest of the session would be video-and audiotaped (Annexure D). Written consent for video-and audiotaping of the session was obtained from each participant before commencement of the focus group interviews. The researcher acted as the facilitator in each focus group interview and was assisted by a translator (for Sesotho) and an assistant who video-and audiotaped the entire session. Each participant was encouraged and given an opportunity to voice his/her opinion in a relaxed and informal environment. The purpose and format of the discussions were outlined at the start of the procedure, thus setting the group at ease. Participants were made aware that the sessions were informal and all opinions pertaining to the topic were welcomed as qualitative research gives participants the freedom to express their ideas in order to arrive at a deeper understanding of the situation and variables are therefore not as limited as in quantitative research (Denzin and Lincoln 2011:285).

Focus groups were conducted in English (as preferred by all participants) in each of the municipalities in the Thabo Mofutsanyane district in order to collect data on the perceptions, attitudes and practices of CHWs with regard to their role in health promotion and the prevention of illness, as well as inter-professional referral and cooperation with specifically

physiotherapists related to this as part of their duties within the re-engineered PHC plan (see 3.1).

The researcher asked the questions and repeated as necessitated, keeping track of time as focus group discussions should ideally not exceed 90 minutes (Denzin and Lincoln 2011:285). The researcher therefore attempted to stay within that limit.

3.9.3 Explorative interview (as opposed to pilot study)

An explorative interview was conducted in the Nketoana municipality where the entire procedure as described in *3.9.2* above was tested from start to finish. The unit of analysis in the explorative interview was all the CHWs in this municipality.

The information obtained from this explorative interview was included in the main study data analysis, as no changes were made after completion of the explorative interview. The time to complete the data collection, as well as the understandability of the questions was also determined by the explorative interview.

3.9.4 Main study data collection

Data collection in the remaining four clinics within the Thabo Mofutsanyane district followed upon successful completion of the explorative interview (as included in *3.9.3*). These data collection opportunities also followed exactly the same procedure as the explorative interview and as included in *3.9.2* above.

3.9.5 Data Analysis

Two sets of data were analysed namely data from the demographic questionnaire and from the focus group interviews.

3.9.5.1 Quantitative data analysis: Demographic questionnaire

At completion of the data collection and coding of the short demographic questionnaire, quantitative data from these demographic questionnaires were typed into an Excel spread sheet. An independent person checked the data for any inconsistencies or input errors. The data in the Excel spread sheet were analysed in cooperation with the Department of Biostatistics, UFS and interpreted as well as reported on by the researcher.

3.9.5.2 Qualitative data analysis: Focus group interviews

A brief overview of the process to analyse the qualitative data included that data collected from the focus group interviews were firstly transcribed verbatim by the researcher, then coded by the researcher herself and checked by an independent co-coder (Dr. L van Rhyn), who is an expert in qualitative research methodology. Member checks specifically were not performed in this study as many participants reside far from Bloemfontein and do not have access to technology such as email. Verification of data was thus only done by means of the verbatim transcription of all focus group interviews.

In addition to the formal focus group interviews, informal conversations were also written down as soon as possible (i.e. during or directly after the focus group interview), according to the comfort level of participants with note taking. Data analysis of qualitative data included both these sets of data (i.e. formal and informal).

- **Transcription of data**

Video-and audiotaped data were transcribed verbatim by the researcher. Non-verbal cues were also described (i.e. informal data set), attempting not to omit any information. The researcher studied the data, "memoing" personal impressions in order to critically evaluate insights gathered from the data against patterns of data that emerged from the study. The procedure is in line with that described by Nieuwenhuis (2007:104).

- **Organising and storing the data**

Different data sets (i.e. interview data and observation data) were kept separate and each section of the data was marked in different colours according to identifying characteristics (when, where, why and how it was collected). Additionally, each participant was labelled with a number in order to identify all data pertaining to that specific person, also in accordance to Nieuwenhuis (2007:104) as labelling the material ensures easy retrieval and contextualising.

Data sets were stored as such in separate files on the researcher's computer as well as in hard copy by the researcher.

- **Coding of data**

The researcher read through all the transcripts repeatedly and highlighted data bits from which codes for the data could be identified.

Each segment of data was marked with descriptive words after the researcher had read through the transcribed information in order to retrieve data bits effectively.

Inductive codes were developed by the researcher as she progressed by examining the data, i.e. codes emerged from the data as described by Nieuwenhuis (2007:107).

The researcher continuously refined and revised the codes, putting data together in new ways (axial coding). Enumeration also helped to clarify words such as "many" and 'some" by means of establishing frequency, as described by Nieuwenhuis (2007:108) counting the number of times these words were used.

- **Establishing categories**

The researcher read through the codes, looking for recurrent themes, which became initial categories. Related codes were thus organised into these initial categories, assigning a descriptive phrase to each. Cutting and sorting was done to organise the categories, where sections of data were cut from the hard copy and put into category piles. Constant moving back and forth through the data was done where the researcher also created sub-categories which allowed for greater discrimination in the data analysis (Nieuwenhuis 2007:109). In accordance with the data analyses methods described by Denzin and Lincoln (2011:285), the researcher assigned codes (descriptive phrases) to each initial category and a master list was created to explain each category.

Upon establishing these initial categories, the researcher re-read initial transcripts to verify whether she had captured all the relevant insights that emerged from the data through the coding and categorisation process. This assisted the researcher to limit the misinterpretation of data.

The researcher finally re-examined all the categories and found possible links between them by writing all the categories on note cards and spreading them out onto a table. All analysed data sources were worked through and lines were drawn between categories that were connected. A network diagram was thus constructed to show possible relationships/links between parts of a whole. The purpose of such a diagram is to report the data in such a way that the reader can

easily follow the links and interpretations can be made (Nieuwenhuis 2007:111) as was also the purpose within this study.

After sorting through the data, consultation between the researcher and the co-coder brought forth the decision that the main categories would consist of the six focus group questions presented to the participants. This deviates slightly from the Creswell method (Creswell 2009:185), however the latter was applied to establish sub-categories and themes (see Figure 4.2). Sub-categories were established after reading through the gathered data moving backward and forward and continually sorting through possible new links to existing themes emerging from the coded data. Consensus on all sub-categories and themes was reached between the researcher and the co-coder.

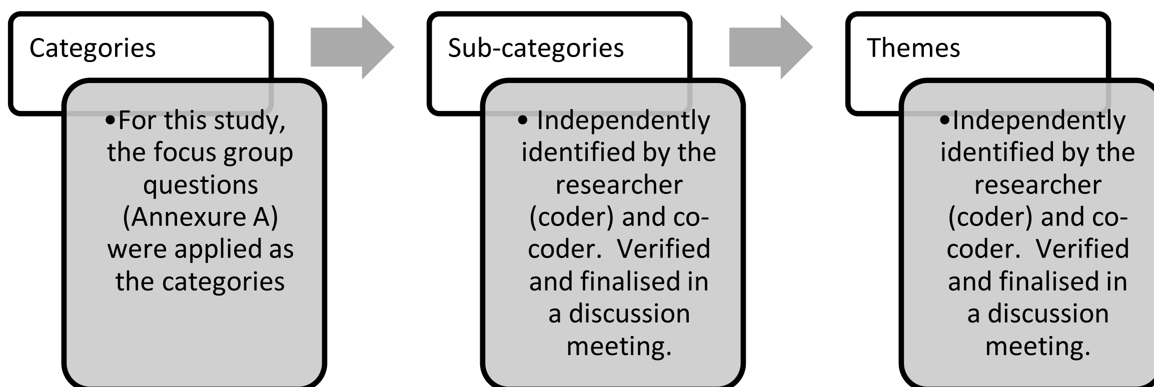


Figure 3.2: Application of the Creswell process [(Creswell (2009:185)] for the identification of categories, sub-categories and themes

3.10 INTERPRETING DATA

Analysed data were now brought into context with existing knowledge in order to bring new insight to the perceptions, attitudes and practices of CHWs and their role in health promotion and prevention of illness, as well as inter-professional referral to physiotherapists as focus group interviews often show contradictions, as well as elaboration on the topic leading to valuable new information (Nieuwenhuis 2007:108).

The researcher searched for emerging patterns and explanations in the data, ultimately aiming to arrive at a new understanding of the research topic and answering the research aim and purpose.

3.11 TRUSTWORTHINESS

The trustworthiness of a research study is the degree to which the researcher is able to draw conclusions from the outcomes of the findings yielded by the data (Leedy and Ormrod 2010:101). The researcher ultimately aims to obtain a truthful picture of what has been said and seen. Strategies contributing to achieving this would include amongst others, maintaining confidentiality and avoiding generalisation (Babbie and Mouton 2011:276).
As mentioned before, each of the focus group interviews were video-and audiotaped and data were transcribed verbatim. This allowed the researcher to carefully analyse each bit of data obtained in each clinic without any information being lost or forgotten, as she returned to these tapes and notes repeatedly. This process enabled the researcher to begin to identify similarities and differences within the different interviews, yet avoiding generalisation by referring back to the original tapes and notes.

The fact that the researcher had spent extended time in the municipalities performing the data collection assists with the richness and depth of this process. A limitation is noted by the fact that the researcher did not accompany the CHWs on their home visits and in the field.

Data **saturation** was achieved due to all the CHWs participating in each focus group interview, as well as by evidence that no new data emerged from subsequent focus groups.

Babbie and Mouton (2011:277) state that **triangulation** is another valuable way in which the trustworthiness of a qualitative research study could be enhanced. By including oral and observational data, the researcher was able to utilise **triangulation** of data, transcribing data verbatim, noting emotions, body language, dynamics within the group and facial expressions.

Triangulation was further enhanced by making use of a co-coder to establish categories, sub-categories and themes independently. Consensus was reached on all sub-categories and themes.

The steps included below were followed in order to minimise **measurement errors**.

- A thorough literature review was performed to ensure content validity of the focus group question list.
- The short demographic questionnaire was drafted in English, Afrikaans and the local language of the district (SeSotho), translated and back translated by a professional translator. As one of the minimum requirements of appointment as a CHW is that these candidates are able to read and write, they were able to complete these questionnaires.
- The entire focus group interview was recorded on video and audiotaped, stating the date, place and method of how the interviews were to be conducted.
- The researcher acted as the facilitator during the data collection. An interpreter was also present during the focus group interviews in case a question was unclear or not understood. The role of the interpreter was explained to participants at the introduction to the study.
- A box was provided where the demographic questionnaires could be deposited after completion to ensure confidentiality.

3.11.1 Credibility (in preference to internal validity)

A post-graduate compulsory one year module on Research Methodology, presented by the School for Allied Health Sciences (UFS) was completed by the researcher before commencement of this study.

The researcher received training on how to effectively conduct focus group interviews by attending a theoretical and practical workshop on focus group interviews on 24 March 2014, presented by Dr L. van Rhyn, an expert in qualitative research. Follow-up sessions and discussions (telephonic, via email and personal) with Dr van Rhyn succeeded this workshop where the researcher engaged in various interactive practical interviews in preparation for the research study.
Findings were continually discussed with the co-coder to ensure that a truthful picture was portrayed.
Data obtained from this study will be described in detail, depicting the various interactions and opinions and portraying complexities as described by Delport in De Vos *et.al.* (2010:346).

3.11.2 Transferability (in preference to external validity)

Transferability was achieved by means of keeping the boundaries of this study consistent, using purposeful/purposive sampling (all CHWs in the district), applying the same inclusion and exclusion criteria and repeating the entire process of data collection as described in *3.9.2*. Data collection and analysis was executed following the same procedure exactly in every municipality.

3.11.3 Dependability (in preference to reliability)

A detailed description of the methodology applied, as well as the data collection procedure was presented explaining the method, tools and procedure followed during data collection. It is presented in such a manner that future researchers could conduct the same investigation and achieve similar findings.

3.11.4 Conformability (in preference to objectivity)

The researcher kept an audit trail throughout the entire investigation. This trail included raw data, thought processes, decisions and the reasoning behind them, as well as all the information relating to the development of the focus group questionnaires.

3.11.5 Bracketing

The researcher was continually aware of and reminded herself of possible bias obtained during the literature control by documenting any detected bias and deliberately reflected on keeping an open mind.

3.12 ETHICAL ASPECTS

A copy of the study protocol was submitted to the Ethics Committee of the Faculty of Health Sciences, UFS for approval (ECUFS NR 174/2013)(Annexure F). Permission to perform the study was also obtained from the DoH of the Free State province by means of a letter of permission that was completed and signed (Annexure E). A signed copy of this document was submitted to the Ethics Committee of the Faculty of Health Sciences, UFS, before commencement of the study.

Following the explanation of the study, each participant signed a consent form, drawn up in Afrikaans, English and SeSotho, as per preference of the participant (Leedy and Omrod 2010:116; Pedroni and Pimple 2009:6). Participants were assured that participation was

voluntary, all information would be treated in the strictest confidence and participants were permitted to withdraw at any time without being penalised in any way.

Written informed consent was also specifically obtained from participants to be video-and audiotaped. Capturing of data was handled confidentially by the researcher herself. Additionally the interpreter, research assistant and participants signed a confidentiality agreement whereby aspects discussed during the focus group interviews would be handled in confidence.

The information obtained was stored on an external hard drive that was word protected and could only be accessed by the password code known only to the researcher. Video-and audiotapes were kept in a locked steel cabinet to which only the researcher had a set of keys. All data and recordings will be stored in a secure location for six years before being destroyed.

3.13 CONCLUSION

This chapter depicted a detailed description of all aspects related to the research methodology applied within the planning, execution and reporting on the research study. Linked to this, Chapter Four will focus on the data collected during the study by means of the processes as explained in this chapter.

4. CHAPTER 4: FINDINGS

4.1 INTRODUCTION

The previous chapter provided a discussion about the research methodology.

Findings obtained during the data collection process will be presented in this chapter. The study comprised out of both a quantitative as well as a qualitative component. Quantitative data were obtained by means of a short demographic questionnaire on the five municipalities represented in the Thabo Mofutsanyane district and the qualitative component consisted of questions that were discussed within the five focus group interviews in the five municipalities within the same district (see Annexure A). The first short section of this chapter will portray the findings obtained from the demographic questionnaires. Given the descriptive nature, the researcher will mainly use tables and graphs to display the findings. The findings obtained from the focus group interviews will be presented by means of main categories, sub-categories and themes respectively. To ensure data were correctly attributed to the identified categories, sub- categories and themes, an experienced colleague independently evaluated the data to ascertain accurate placement thereof.

4.2 QUANTITATIVE FINDINGS

A total of five municipalities in the Thabo Mofutsanyane district were identified for the study of which five gave consent to participate (see 3.6).

The study included 31 participants from the five included municipalities in the Thabo Mofutsanyane district in the Free State.

Table 4.1: Municipalities represented by study participants

Municipality	Number of CHWs included (100% of CHWs participated)
Setsoto	11
Dihlabeng	5
Nketoana	6
Maluti	6
Phumelela	3

Table 4.1 indicates the distribution of these study participants across the different municipalities (see 3.5 and 3.6).

The study participants included 84% females and 16% males, with a mean age of 39 years.

The work experience of CHWs working in the field of community-based health varies between two to three years with no participant having more than three years work experience (as indicated in Figure 4.1 below). These workers had all signed contracts of employment with the RSA DoH within the past three years (since 2011) when the re-engineered PHC health plan was first introduced (see *2.5.1*).

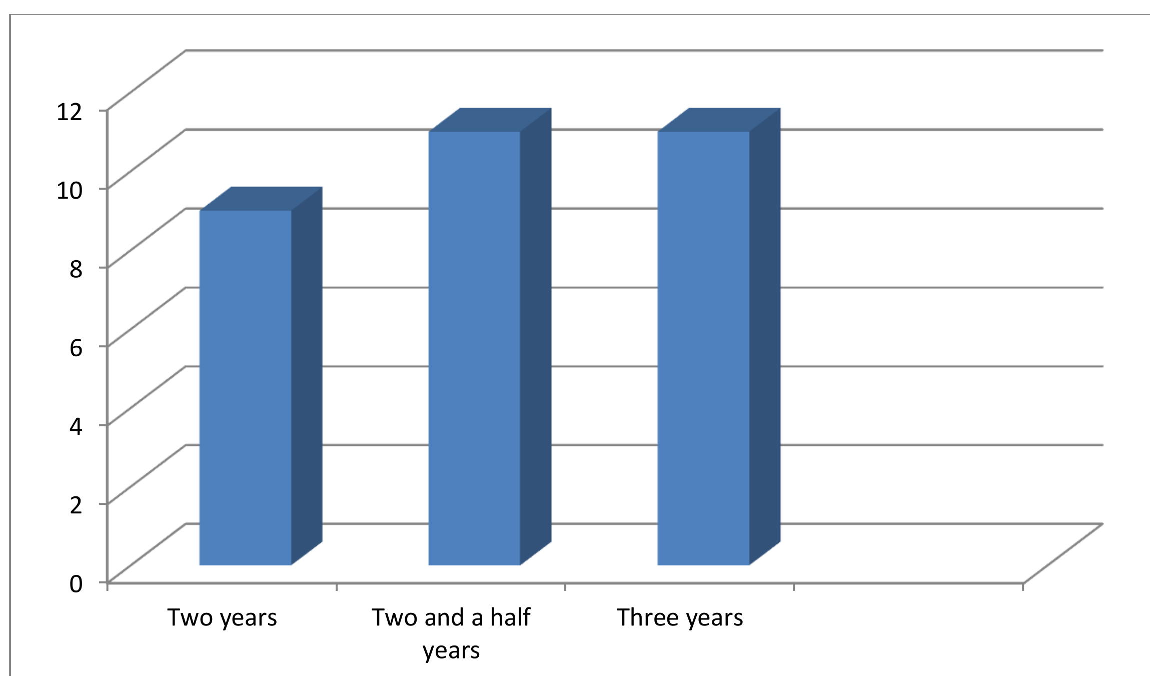


Figure 4.1: Work experience of study participants

N=31

Figure 4.1 indicates that a slight majority of participants (11) had two and a half and three years' experience, while nine participants indicated that their experience as CHWs was two years.

4.3 QUALITATIVE FINDINGS

Qualitative data were obtained by means of focus group interviews (see *3.9.5.2*).

Coded data are presented according to the method as explained by Creswell (2009:185) where data are divided into three columns namely **categories**, **sub-categories** and **themes**. Firstly, the researcher, as well as the co-coder read through the transcribed data repeatedly in order to establish an overall idea of the meaning of the data. Consultation between the researcher and the co-coder brought forth the decision that the main categories would consist of the six focus group questions presented to the participants (see *3.9.5.2*). Both the researcher and the co-coder then independently organised the data into the three columns (categories, sub-categories and themes), after which they compared their coding and made adjustments as agreed upon by both parties (see Figure 3.3).

4.3.1 Categories

Findings for the qualitative component of this study will be provided by firstly stating the six main categories (see Figure 4.2), after which each category is then broken down into sub-categories with its own themes (see Figure 3.3). At the end of each category important, conclusive aspects will be highlighted as related to each specific category.

Categories

- Perceptions, attitudes and practices of CHWs on health promotion and prevention of illness and their role therein.
- Perceptions, attitudes and practices of CHWs regarding the role of physiotherapists in health promotion and prevention of illness.
- Interaction between CHWs and physiotherapists within the community.

Figure 4.2: The six main categories in this study

4.3.1.1 Category One

A summary of the main comments and remarks related to Category One as made by participants in each of the focus group interviews is reflected in Table 4.2 below and served as a comparative tool in order to gain insight into Category One data as collected in this study.

Table 4.2: Comparison between the five focus groups regarding the perceptions, attitudes and practices of CHWs on health promotion and prevention of illness and their role therein

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto
Give information pamphlets about TB, give health talks and how it is spread and prevented.	Educate the community, tell them how diseases are spread, have health talks on TB and HIV. Encourage the members to get tested for TB, HIV and other diseases.	Encourage members to get tested for diseases. Educate the community how to protect themselves from diseases such as HIV.	Teach people how to stop germs from spreading. Tell them what the symptoms of TB and HIV are.	Educate the community about family planning and adherence to treatment. Give information about abuse, HIV, TB and the importance of getting tested. Encourage members to know their status.
Focus on nutrition and healthy lifestyles and not to take medication without eating.	Inform the community of the importance of washing their hands, hair and brushing their teeth, keeping doors closed to prevent germs from entering.	Tell members to plant gardens for fresh vegetables.	Educate the community about hygiene.	Teach them to eat healthy food like vegetables.
Provide a lot of counselling, comfort and emotional support, especially to HIV patients.			Support people who test positive for HIV.	

Assist with teenage pregnancies and the importance of protection during sexual activities.			Encourage teenage girls to visit the clinic if they are pregnant.	Warn youngsters about teenage pregnancies. Provide condoms.
	Teach families how to care for the bedridden and weak patients.			
		Help pregnant women to have healthy pregnancies and healthy babies. Stress the importance of vaccination. Encourage breastfeeding and bonding with their babies.	Inform women about "*Pap*" smears and to go for regular check-ups. Teach new mothers how to care for their babies. Check the nutrition of children. Assist with breastfeeding and bonding. Follow up on mothers with new babies. Stress the importance of immunisations.	Tell pregnant women to go to the clinic for check-ups. Immunise their children.
	Encourage patients to come to the clinics for their medicine.	Take the clinic to the community.	Clinics are too full we help people where they live. We can take the medicine to their homes.	Removal of stitches at their homes.

After compilation of Table 4.2, data were reviewed and similar aspects were grouped together. This grouping subsequently led to the formation of three sub-categories within Category One (see Figure 4.3).

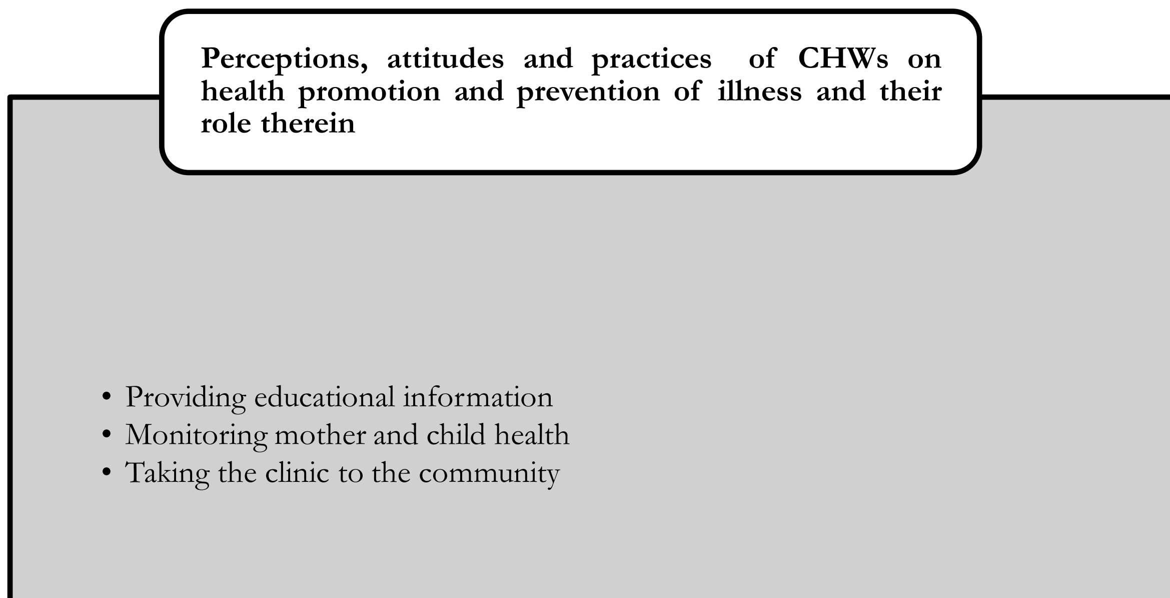


Figure 4.3: Sub-categories that emerged from Category One

At completion of the identification of these sub-categories, themes naturally started emerging by simply documenting the comments and input as gathered from the participants. Information gathered within the themes for Category One included all feelings, emotions and opinions of CHWs which strongly emerged during the focus group interviews.

The section below will describe these themes in more detail, according to each relevant sub-category.

Under the sub-category of *providing educational information* (refer to Figure 4.3), the **themes** that emerged were predominantly related to **practices**:

- CHWs play an important role in informing community members about the various services that are available at the local clinics.
- They provide information about TB and HIV, how it is prevented, transmitted, signs and symptoms as well as prompting members of the community to get tested and know their status in order to commence with treatment.

- Provide education regarding all aspects of safe sex and the dangers of sexually transmitted diseases.
- Information and education about the importance and maintenance of personal and food hygiene.
- Mothers are provided with information about the importance of baby and child immunisation and the appropriate ages at which these immunisations are to be administered.
- The theme of nutrition was present in most of the municipalities and the importance of a balanced, healthy diet was greatly emphasised. A general feeling of concern and empathy was felt by most CHWs because of the lack of nutritious, fresh food available to their community members.
- CHWs spend a great deal of time informing members of the community about adherence to treatment and how to correctly consume medication (before or after meals, chronic medication).
- Information is given about family planning and birth control.
- Members of the community are informed about healthy lifestyles, for instance to open windows, clean their homes and to get enough exercise.
- Education on the caretaking of weak, elderly and/or bedridden family and/or community members (turning them, putting them into a chair, checking for pressure sores).
- Information about the procedures following rape or abuse at the police station and hospital.

Under the sub-category of *monitoring mother and child health* (refer to Figure 4.3), the **themes** relating to **practices** were once again what emerged:

- Encouraging bonding and breastfeeding from day one.
- Education on "Kangaroo care" for babies and the benefits thereof.
- Check the "Road to Health" charts of children.
- Provision of referral letters to women/mothers to undergo '*Pap*" smears.

Under the sub-category of *taking the clinic to the community* (refer to Figure 4.3), the same **theme** of **practices** emerged:

- In many of the municipalities CHWs are permitted and expected to take medication from the clinics to the homes of the patients.

- Defaulters (who do not adhere to treatment) are identified and referred back to the local clinic.

Highlights of Category One

Highlights of Category One were identified as a result of intensive, continuous backward and forward review of the data collected for Category One, further scrutiny of data included under the sub-categories and themes, which ultimately led to three highlights that were identified for Category One. These highlights are included in Figure 4.4 below.

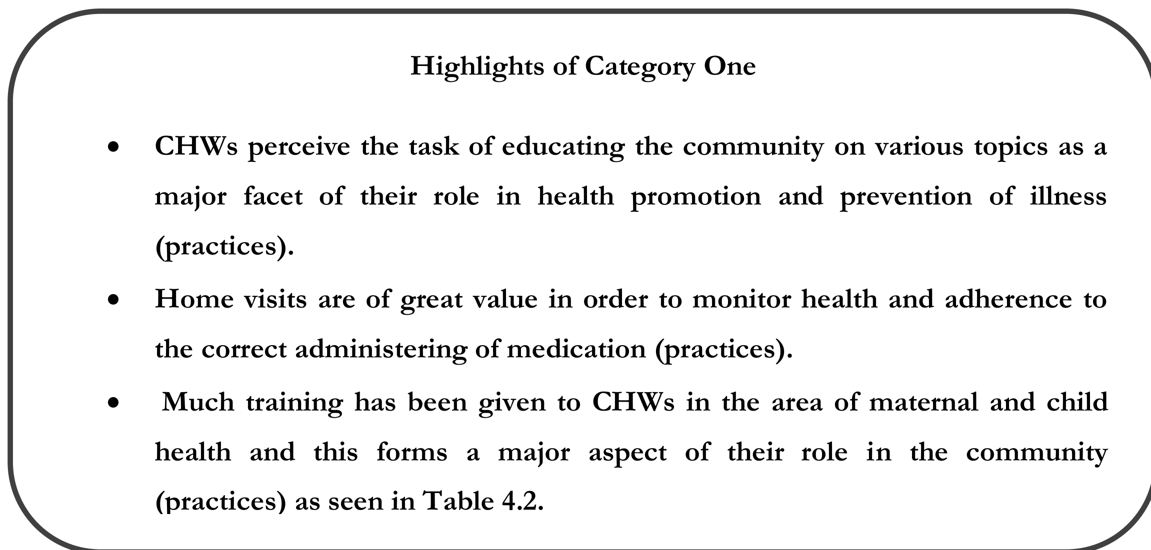


Figure 4.4: Highlights of Category One

4.3.1.2 Category Two

A summary of the main comments and remarks related to Category Two by participants in each of the focus group interviews is reflected in Table 4.3 below and served as a comparative tool in order to gain insight into Category Two data as collected in this study.

Table 4.3: Comparison between the five focus groups regarding the perceptions, attitudes and practices of CHWs on the role of physiotherapists in health promotion and prevention of illness

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto

Physiotherapists play a big role, but only for those who know what they do, most people don't know what they do. Their role is not much in the community. They treat people who have suffered a stroke.	Physiotherapists help patients to mobilise with crutches. They teach people to drink more water. Help mentally ill patients become more focussed and to take their medication. Get the elderly to exercise more. They help patients who have had a stroke.	Physiotherapists are responsible to exercise patients. They educate people on how to move. Physiotherapists exercise amputation patients. They treat stroke patients and encourage the elderly to mobilise.	Physiotherapists teach people how to move with crutches and wheelchairs. They help babies who need orthotics. Physiotherapists also do a lot of HIV counselling and give advice.	Physiotherapists encourage stroke, bedridden and cripple people to move. They also screen babies for developmental delays. They do a lot of counselling and help stressed people. They encourage males to go for circumcisions. They make splints.

They are not around in the community, only in the hospitals.	If physiotherapists accompany CHWs the community will respect them more.			Physiotherapists never go out into the communities.
They should come to the communities and teach people about health promotion and prevention of illness. They can teach CHWs about stroke treatment.	Physiotherapists can teach CHWs how to train people to move and accompany them to the homes of patients. Physiotherapists can teach CHWs new skills in order to help their patients.	The elderly need advice and support from physiotherapists regarding backaches.		It would help the community a lot if CHWs could receive training from physiotherapists.
They (physiotherapists) never follow up on their treatments when patients get discharged.				

Data obtained in this category showed an interesting variety of opinions of participants regarding this aspect. Sub-categories can be seen in Figure 4.5 below.

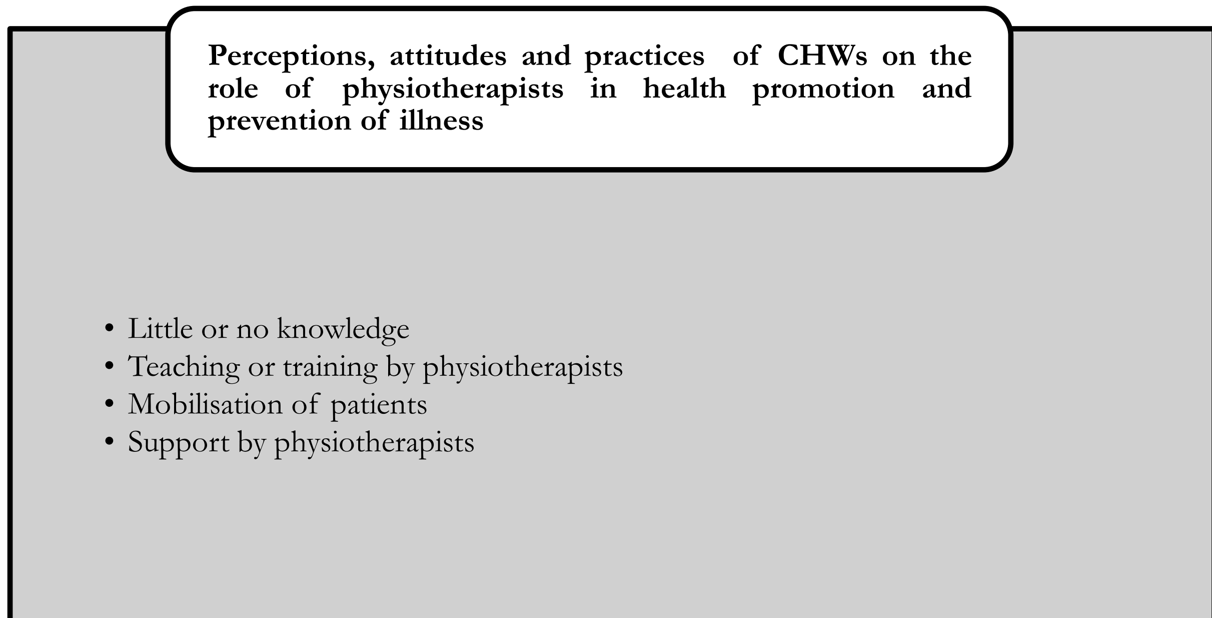


Figure 4.5: Sub-categories pertaining to Category Two

The following aspects pertained to the first sub-category, namely that numerous participants admitted to *not knowing what physiotherapists do* (see Figure 4.5). It is the perception of many CHWs that physiotherapists seldom go into the communities and therefore there is very little/no knowledge of their role in health promotion and prevention of illness, nor of the significance, if any, of their work. **Themes** that emerged from this sub-category were related to **perceptions**:

- Many of the participants were under the wrong impressions of what physiotherapy as a profession actually means and entails.
- Some CHWs have the perception that physiotherapists only do counselling or attend to mentally unstable, depressed or "stressed" patients.
- A small number of the CHWs are under the impression that physiotherapists only play a role in encouraging males to go for circumcisions.

The second sub-category of *teaching or training by physiotherapists* (see Figure 4.5) depicted the **perceptions**, **attitudes** and **practices** of some CHWs that physiotherapists play an important role in this area regarding health promotion and prevention of illness. The participants who were familiar with physiotherapy further expressed their desire for teaching and training of skills

pertaining to physiotherapy management of people in the community. **Themes** that unfolded were:

- They (physiotherapists) could teach the CHWs how to administer medication.
- Physiotherapists teach families skills to manage patients at home.
- Physiotherapists teach CHWs how to manage the elderly as well as patients who have suffered a stroke.
- By teaching the CHWs and the community about diseases, illness could be prevented.

The third sub-category was named *mobilisation of patients* (see Figure 4.5) and led to the emerging of **themes** relating to **perceptions**:

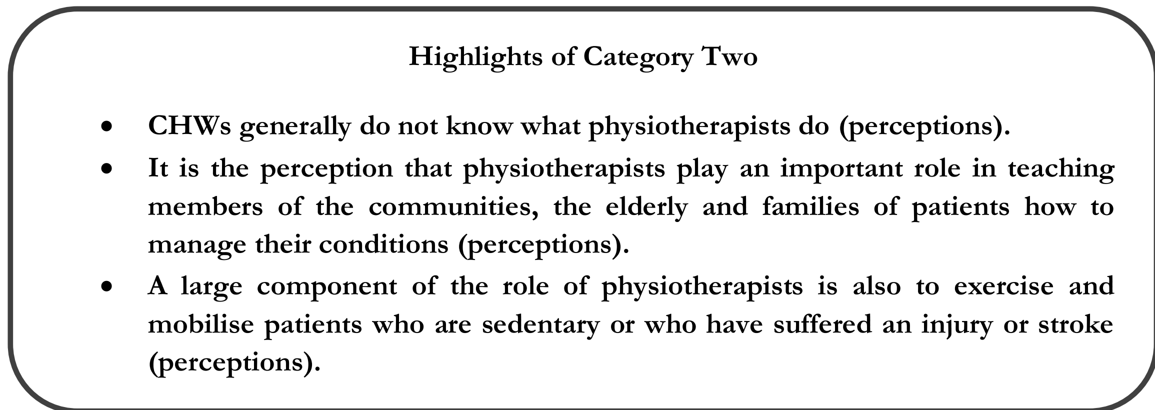
- They (physiotherapists) exercise stroke patients.
- They help people to walk who struggle and cannot walk.
- They treat patients who had had amputations, those in wheelchairs, patients on crutches, the cripple, weak and bedridden where their role is to get them mobilising and in this manner promoting health.
- They offer exercise classes (in the form of group sessions) for the elderly.
- They screen and treat children with possible developmental delays who are not walking by two years of age.
- They organise splints and "special shoes" for people or children with deformities.

The fourth sub-category was named *support by physiotherapists* (see Figure 4.5) and presented the following **themes** relating to **attitudes**:

- They (physiotherapists) could support CHWs by following up on patients who were treated by them in the hospital and visiting these patients at their homes.
- Physiotherapists are better equipped to mobilise and treat the elderly and patients with illnesses, (stroke) therefore they could assist the CHWs to provide a better service by supporting these CHWs in the community.

Highlights of Category Two

Highlights of Category Two were identified as a result of intensive, continuous backward and forward review of the data collected for Category Two, further scrutiny of data included under the sub-categories and themes, which ultimately led to three highlights that were identified for Category Two. These highlights are included in Figure 4.6 below.


Highlights of Category Two

- **CHWs generally do not know what physiotherapists do (perceptions).**
- **It is the perception that physiotherapists play an important role in teaching members of the communities, the elderly and families of patients how to manage their conditions (perceptions).**
- **A large component of the role of physiotherapists is also to exercise and mobilise patients who are sedentary or who have suffered an injury or stroke (perceptions).**

Figure 4.6: Highlights of Category Two

4.3.1.3 Category Three

The third category is the perceptions, attitudes and practices of interaction between CHWs and physiotherapists within the community (see Annexure A). Firstly the data collected in the five focus group interviews related to Category Three are included in Table 4.4 below.

Table 4.4: Comparison between the five focus groups regarding the perceptions, attitudes and practices of CHWs on the interaction between themselves and physiotherapists

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto
There are too few physiotherapists in the community.			There is not one physiotherapist in the community. Nobody has ever seen a physiotherapist in his/her home.	Patients are referred for physiotherapy and when they get to the clinic there is nobody there. One physiotherapist cannot possibly attend to all the patients in the community.

CHWs require training for specific conditions like stroke, spastic children and TB. Physiotherapists can train their team leaders who could then in turn train the CHWs.	If physiotherapists teach CHWs, these workers can in turn teach community members about the management of their diseases.	CHWs want support groups where they can learn how to manage amputation and stroke patients.		
Physiotherapists have to cooperate with CHWs and let them know where the patients are so that the CHWs can follow up with treatment.	CHWs need to form a "chain" and work together.		If physiotherapists and CHWs work as a team the patients could receive treatment without having to wait in long queues.	
	Physiotherapists need to affirm CHWs in the communities.			
				Nobody ever asks what problems CHWs are experiencing. CHWs have no support system.

After careful consideration of the data collected as part of Category Three, the sub-categories pertaining to the interaction between CHWs and physiotherapists are shown in Figure 4.7 below.

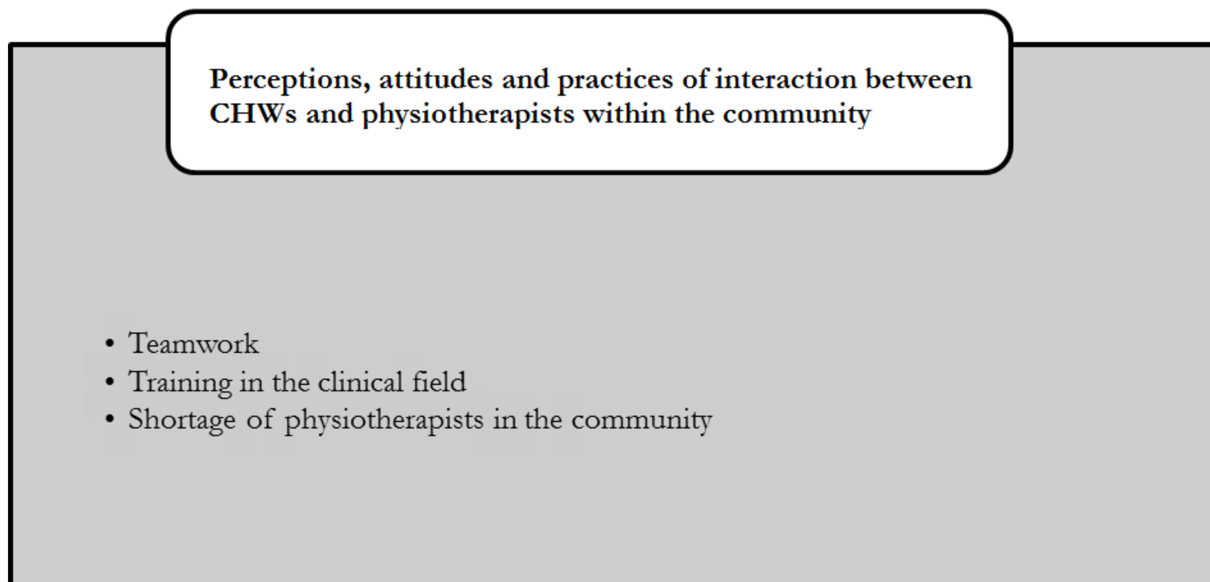


Figure 4.7: Sub-categories established from Category Three

Under the first sub-category of *teamwork* (see Figure 4.7), the following **themes** emerged relating to **attitudes** and **practices**:

- Physiotherapists could inform CHWs in the communities of all the patients they (physiotherapists) treat in the hospitals in order for CHWs to continue a service once the patients are discharged and return to their communities.
- There has to be a two-way communication between CHWs and physiotherapists. It was suggested that CHWs can report back to physiotherapists about the progress of patients discharged from hospital.

Four **themes** relating to **attitudes** and **practices** became evident from the second sub-category namely *training in the clinical field* (see Figure 4.7)

- CHWs made the suggestion of a physiotherapist to train their team leaders on aspects concerning physiotherapy, exercises and rehabilitation after which the team leaders could in turn train CHWs at their local clinics.
- It would be beneficial to CHWs if physiotherapists could practically demonstrate the treatment of all the different types of patients seen by CHWs in the community (stroke, spastic, weak and amputation patients).

- Training to be given in the homes of the people.
- Physiotherapists could teach CHWs at support groups.

The third sub-category named *shortage of physiotherapists in the community* (see Figure 4.7) presented the following **themes** that relate to **attitudes** and **practices**:

- The shortage of physiotherapists in the community interferes with the interaction between these two parties.
- Only one physiotherapist is assigned to an entire municipality and cannot attend to the needs of all the people at their homes.
- When community members arrive for pre-arranged appointments with the physiotherapist at the clinic, he/she is often not there when they arrive.

Highlights of Category Three

The issues that influence the opinions of participants regarding their interaction with physiotherapists in the communities are summarised as the highlights of Category Three in Figure 4.8 below.

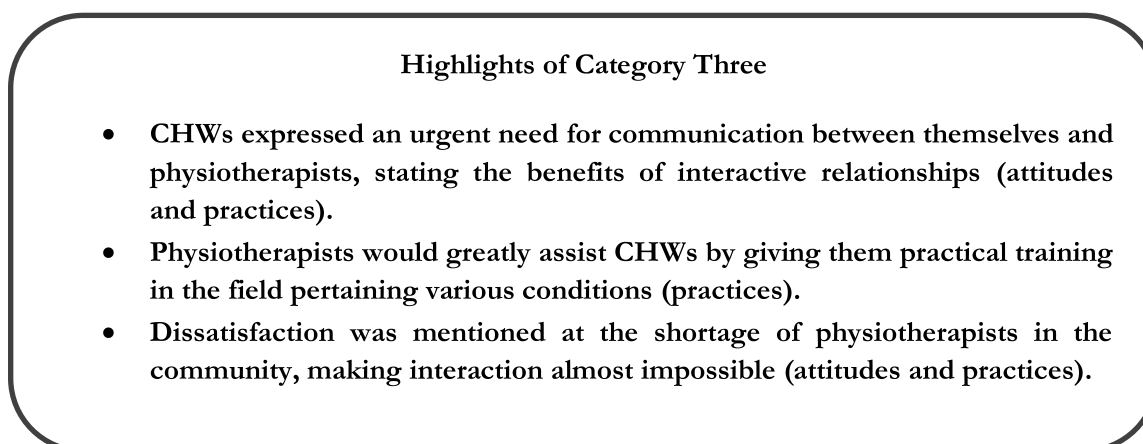


Figure 4.8: Highlights of Category Three

4.3.1.4 Category Four

The fourth category addressed the barriers experienced by CHWs in fulfilling their role in the community as well as in their interaction with physiotherapists. Firstly the data collected in the five focus group interviews related to Category Four are included in Table 4.5 below.

Table 4.5: Comparison between the five focus groups regarding the barriers experienced by CHWs

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto
	CHWs feel that they lack skills and training and that some of their skills are not being used.	Physiotherapists need to train and assist CHWs to become more skilful. CHWs can invite physiotherapists to their group discussions.	CHWs feel that their skills are not being fully utilised as they are only registering households all day long.	
	There is a need for "working tools" such as stationary, badges and uniforms as well as transport.		CHWs need name tags to identify themselves to the community.	Physical supplies like bags, pens and shoes would help CHWs as they have to walk far and are not supplied with any stationary.
CHWs feel that they are not even seen in the community.	Participants expressed the need for a team leader whom they could report back to and ask advice from.	CHWs commented that they felt side-stepped by the DoH and that empty promises were made to them. CHWs feel that their remuneration is too little considering the hours they work and the risks they face.	Clinic sisters deliberately undermine CHWs and shout at them. CHWs need the support of physiotherapists to gain the trust from the community.	The entire community is always quick to criticize CHWs and what they do for them. People expect food, money or medication when CHWs arrive at their homes.
	CHWs are being kept too busy with administration in the clinics and cannot get out into the community.			
	There are not enough CHWs to service the entire area (only three).			
There is no communication		Communication between		CHWs cannot give answers to

between clinic sisters and CHWs.		CHWs, physiotherapists and clinic sisters is a tremendous barrier.		members of the community regarding their medication or treatments as there is no communication with clinic staff.
		Nobody ever asks CHWs about their obstacles, fears and difficulties in the community.	CHWs feel taken for granted by clinic sisters. Clinic sisters refuse to treat patients if the referral is from a CHW.	They have never experienced any support from physiotherapists or clinic staff.
		There are many risks for CHWs (dog attacks and rape).	Sometimes CHWs get raped or attacked by gangsters.	CHWs may contract TB if there are no masks available. Some members of the community set their dogs onto CHWs to attack them if they do not take food, money or medication to their homes.
		CHWs have no room where they could sit and eat or write their reports.	CHWs have no office and safe place to keep confidential patient records.	
				CHWs experience much frustration when patients do not visit the clinics for their medication, as the queues are too long and they are not treated well by clinic sisters when they do arrive at the clinic.

After compilation of Table 4.5, data were reviewed and similar aspects were grouped together. This grouping subsequently led to the formation of three sub-categories within Category Four (see Figure 4.9).

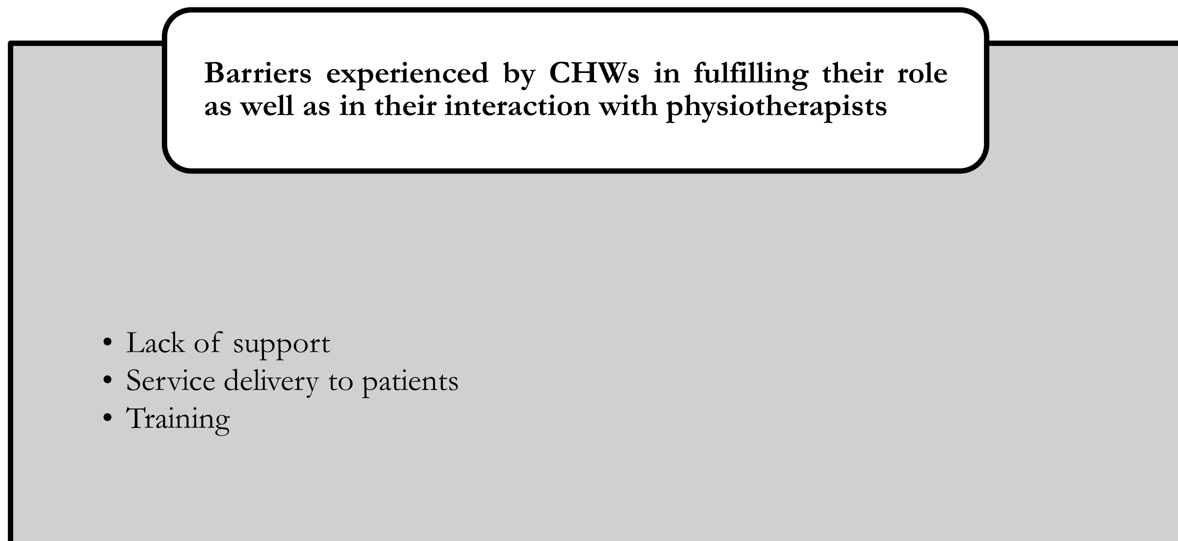


Figure 4.9: Sub-categories that emerged from Category Four

The first sub-category namely *lack of support* (see Figure 4.9 and linking onto Figure 4.5) led to lengthy discussions, presenting the following **themes** relating to **perceptions** and **practices**:

- Lack of communication with physiotherapists (see previous comments in *4.3.1.3*).
- The CHWs felt that they have a general lack of training for the role they are expected to fulfil in the community (also links with Figure 4.7).
- They expressed the lack of a team leader that could support and encourage them and to whom they could report back.
- Almost all of the CHWs commented that the communication and interaction between the sisters/nurses at the clinics and themselves were problematic (some clinics are run by qualified nursing sisters [as referred to by participants] whereas others are managed by nurses and overseen by sisters).
- All the CHWs noted the lack of equipment, for example stationary and name badges, uniforms, transport, shoes, umbrellas and bags.
- There are many risks involved for CHWs in the community, for example they get attacked by dogs, raped and abused by mentally unstable patients.

- CHWs were told initially in 2011 about a district team with a doctor, social worker, sister and team leader to support them. Nobody has ever met or seen these members of the team. CHWs feel that they are left to cope on their own.

The second sub-category of *service delivery to patients* (see Figure 4.9) revealed the following **themes** that relate to **perceptions**, **attitudes** and **practice**s:

- There is a considerable shortage of staff (especially physiotherapists) that goes into the community to assist people in their homes.
- A shortage of CHWs in each community also affects service delivery negatively, as there are sometimes only three CHWs in an entire municipality. As these CHWs are committed to providing a one-on-one service, spending enough time with each individual patient, they seldom get to attend to all the people in the community.
- CHWs are often mistreated and verbally abused by patients.
- There is much frustration throughout all five focus groups with the clinic set-up, referrals and service delivery to patients in the clinics.
- Many of the patients who are being treated with anti-retroviral medication refuse to return to the clinics because of the extended waiting time and extremely long queues at the clinics.
- When CHWs refer patients to the clinics, sisters and nurses at the clinics do not treat these patients well.
- Many clinics have run out of medication to give to patients and these patients are left untreated.
- CHWs generally feel mistreated by sisters at the clinics and that they get taken for granted. A common theme of not feeling appreciated is strongly noted throughout all five focus group interviews.
- There is poor communication between CHWs and clinic staff.
- CHWs feel that they are well trained in the areas of HIV screening and post-natal care, yet they are kept busy doing registrations of all the households and cannot fulfil their actual roles.
- The CHWs are unsure of exactly what they are permitted and forbidden to do in terms of administering medication to patients and taking vital signs. Initially CHWs were permitted to take chronic medication to the homes of

elderly patients and administering these medications to them, but after a while they were informed that they may no longer do this. Patients do not understand this change in arrangement and expect the CHWs to bring their medication to the homes, leading to much frustration and conflict when they arrive empty handed.

- People in the community who cannot present an identification document or birth certificate may not be treated. This causes conflict between CHWs and members of the community.
- CHWs suffer considerable criticism from the community as the latter expect food, medication, clothes and/or money from them.
- Due to previous scams and fraudsters deceiving members of the community (especially the elderly), they do not trust the CHWs. Without identification badges (which they do not possess) the people are reluctant to let them into their homes.
- The patients without any form of income cannot take their medication as prescribed as they do not have food to eat. They blame CHWs for arriving empty handed.
- CHWs feel that physiotherapists possess many skills that are desperately needed in the community, but that these physiotherapists are reluctant to go out into the communities in order for CHWs to learn from them.
- Many CHWs complained about referring their patients to a physiotherapist in the community and then nothing was done in terms of managing those patients. These patients were often sent home without treatment.
- There would be a better service rendered to the community if the CHWs were supplied with "tools", such as stationary, bags and uniforms.

The last sub-category in this section, namely *training* (see Figure 4.9) produced only one **theme** that related to **perceptions**:

- The CHWs generally feel that their training was too short (10 days) and too long ago (2011).

Highlights of Category Four

As can clearly be seen Category Four elicited the greatest response resulting in the most comments. Strong opinions were given and at times the discussions were both emotional and spoke of heartfelt convictions. Figure 4.10 below lists the highlights of this category.

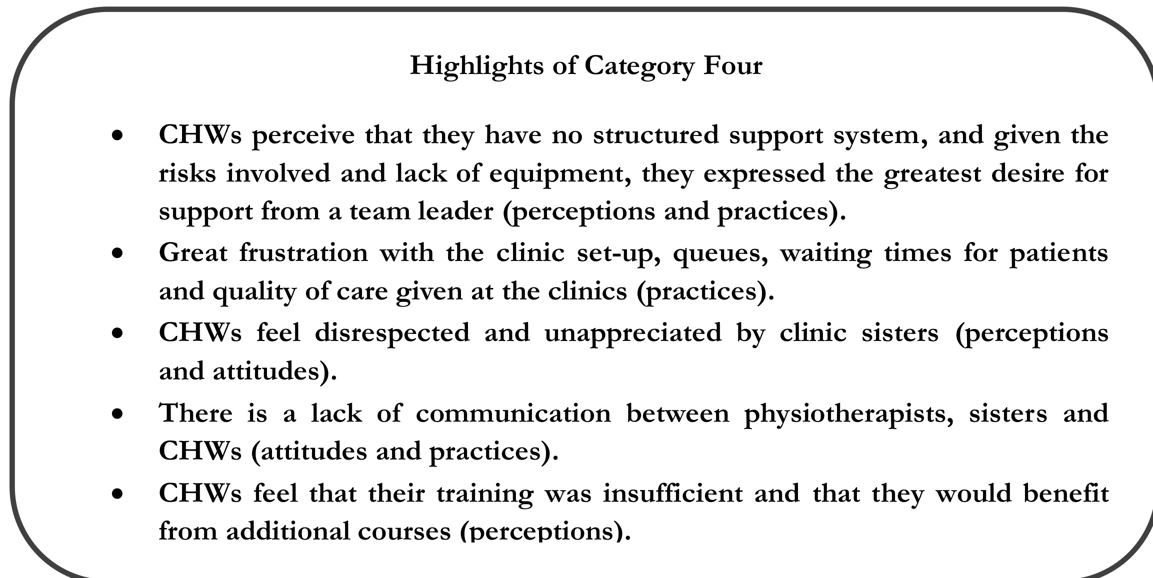


Figure 4.10: Highlights of Category Four

4.3.1.5 Category Five

The fifth category addressed the perceptions, attitudes and practices of CHWs regarding the benefits of their role in the communities as well as benefits of their interaction with physiotherapists.

Table 4.6: Comparison between the five focus groups regarding the benefits experienced by CHWs by fulfilling their role and interacting with physiotherapists

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto
Physiotherapists can get many referrals if they work with CHWs. If physiotherapists also refer to CHWs many patients could receive daily treatment in their homes.	The community stands a much better chance to fight illness and disease if CHWs and physiotherapists join hands and work together as a team. Earlier interventions for diseases like TB.	There has to be a "link" between CHWs and physiotherapists.	Patients will receive care right away. Trust in the CHWs will be instilled in the communities.	The entire community will benefit from CHWs and physiotherapists taking hands.
Having the CHWs and physiotherapists visit their homes will save the people a lot of transport money.	Community members will save money (transport costs) and only emergencies will be seen at the clinics.			Members of the community will save transport money.
The community needs a physiotherapist at least two to three times per week.	The problem of being under-staffed will be addressed if these parties work together.			

	If the CHWs and physiotherapists don’t know how to manage someone they will refer that person to the clinic.			
		If physiotherapists work with CHWs the community will start to understand what physiotherapists do.		
Physiotherapists could equip CHWs with knowledge in order to help their patients.		If physiotherapists will train CHWs in practical demonstration sessions, these workers could pass the knowledge on to the community.		
			At the moment CHWs are not being respected and recognised. By cooperating with physiotherapists these CHWs will be taken seriously.	The community will appreciate this cooperation and the service rendered.
			At the moment CHWs feel extremely frustrated and have no support from clinic staff.	

After careful consideration of the data collected as part of Category Five, only one sub-category could be identified as shown in Figure 4.11 below.

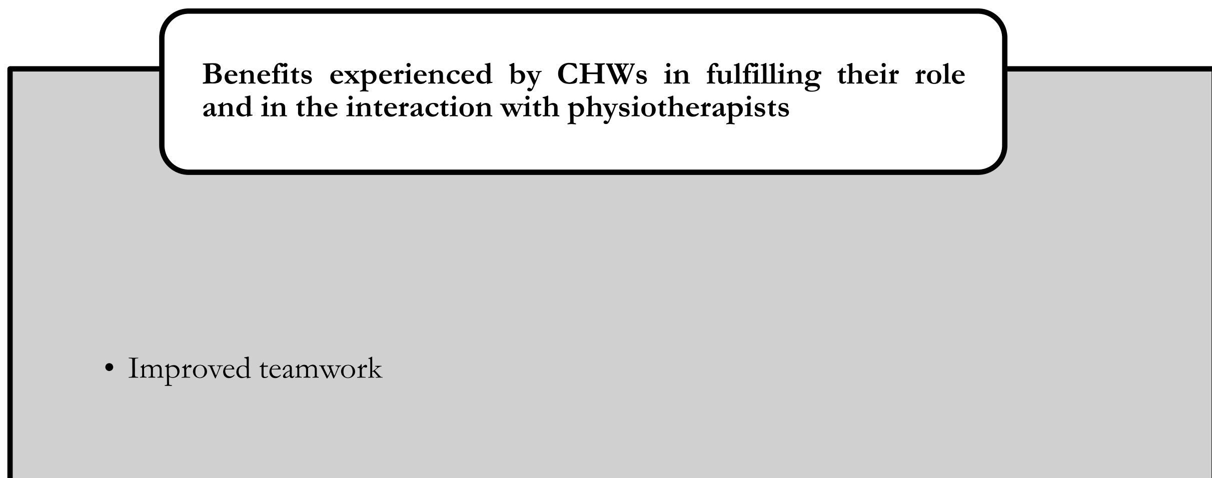


Figure 4.11: Category Five

This category had only one sub-category, namely *improved teamwork* (see Figure 4.11).There were three **themes** relating to **attitudes** and **practices** that emerged from this sub-category namely:

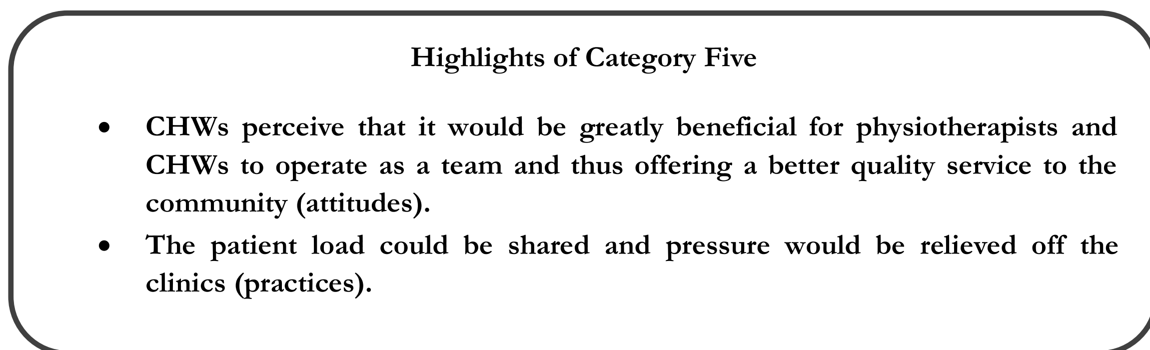
- Firstly CHWs mentioned that physiotherapists and CHWs could share the tremendous workload in the community, providing a more efficient service to the community. Early intervention by physiotherapists and CHWs who are able to attend to more patients in their homes will relieve pressure off the clinics that are already over full. This will result in the clinics assisting only the emergency cases, as is the intention of the re-engineered PHC plan (see 2.3). CHWs are in a position to refer many patients for physiotherapy treatment as well as for other multi-disciplinary management. It was also noted that CHWs believe that together they (CHWs and physiotherapists) can fight diseases more effectively. The community will benefit from interaction with physiotherapists.
- CHWs are in a position to refer many patients for physiotherapy treatment as well as for other multi-disciplinary management as necessitated. In this way inter-professional referral would be promoted and the various parties involved in community health care could cooperate with one another. One participant commented that through the interaction of physiotherapists and

CHWs "*nobody in the community needs to suffer any longer as people will receive the services straight away.*"

- The majority of CHWs felt that they have a lot of knowledge and advice to gain from interacting with physiotherapists. Physiotherapists can equip the CHWs with practical training in the homes of the patients.

Highlights of Category Five

There was an extremely positive attitude regarding this category with participants elaborating enthusiastically about the benefits of their role in the communities as well as of interaction with physiotherapists. Figure 4.12 below lists the highlights of Category Five.



Highlights of Category Five

- **CHWs perceive that it would be greatly beneficial for physiotherapists and CHWs to operate as a team and thus offering a better quality service to the community (attitudes).**
- **The patient load could be shared and pressure would be relieved off the clinics (practices).**

Figure 4.12: Highlights of Category Five

4.3.1.6 Category Six

The last category was devoted to any additional comments by CHWs regarding their role in promoting health and preventing illness as well as their interaction with physiotherapists (see Annexure A). Table 4.7 below gives an exposition of all the additional comments in each of the focus group interviews.

Table 4.7: Comparison between the five focus groups regarding additional comments made

Nketoana	Phumelela	Dihlabeng	Maluti	Setsoto
There is no point in referring patients because they do not have transport. Would be beneficial if CHWs could refer to physiotherapists who could see patients in their homes.	CHWs feel comfortable with the procedure of referring patients.	CHWs have been trained to screen patients.		CHWs screen and refer patients but feel that the referral process is not functioning well.
	The issue of the lack of training was prevalent again. Additional training would help CHWs to have a better understanding of the health problems faced by the community members.	The need for additional training in the clinical field was expressed.	The only training that these CHWs have had is the initial 10 days in 2011. A desperate need for additional training was mentioned. Participants were confident about their training in the area of maternal and child care.	More training about physiotherapy is required, for instance how to treat weak patients and those who have suffered a stroke.
		CHWs were trained to take vital signs but are prohibited from taking these readings in the communities, yet they are expected to perform this task in the clinic.		CHWs mentioned that they do not feel comfortable about taking vital signs and would like more training in this area.
CHWs feel discouraged if patients and relatives don't cooperate with them.			CHWs have no space of their own in the clinics and always feel unwanted.	Participants feel that they have no support from clinic staff.

No support is given by the community or clinic sisters.			These workers start to lose interest in their work because of the treatment from clinic sisters. Eventually they (CHWs) stop using their skills.	

After compilation of Table 4.7, data were reviewed and similar aspects were grouped together. This grouping subsequently led to the formation of three sub-categories within Category Six (see Figure 4.13).

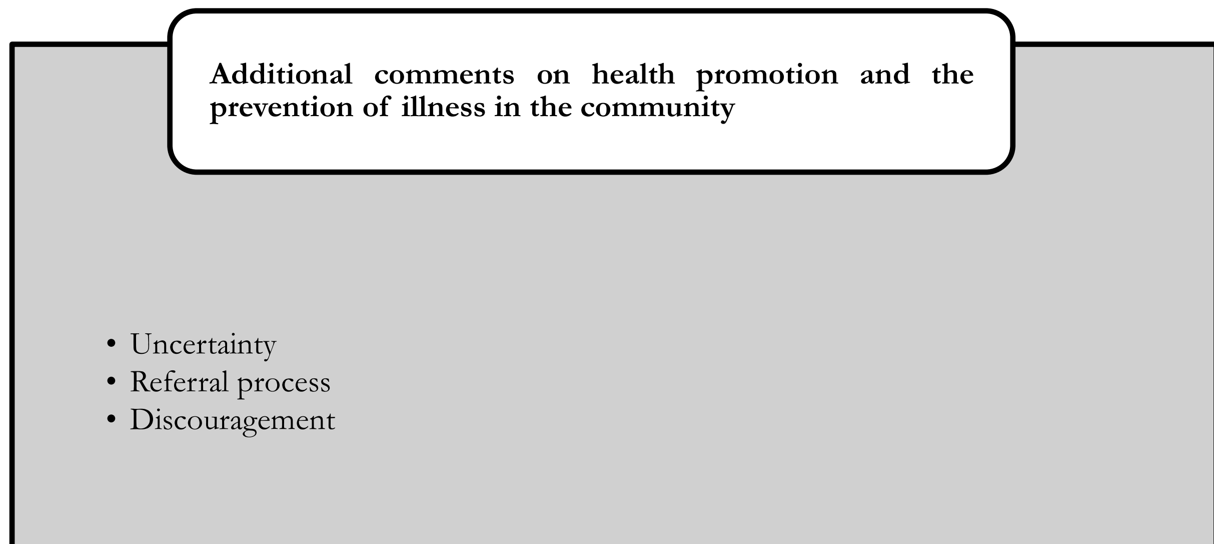


Figure 4.13: Category Six with its sub-categories

Regarding the first sub-category in this section, namely *uncertainty* (see Figure 4.13), the following **themes** were identified that related to **perceptions**, **attitudes** and **practices**:

- CHWs suggested that physiotherapists could visit patients in the community with the CHWs and demonstrate to them (CHWs) how they should manage these patients.
- CHWs could then conduct follow-up visits to monitor progress.
- Patients could be screened at their homes with the assistance of physiotherapists and referred for further treatment if necessary. All CHWs commented on the need for additional training regarding the screening of patients.
- Families are generally uncertain of their management of the patients at home and together with physiotherapists CHWs could assist families in this regard.

- CHWs have been taught the skills to take the vital signs of patients, but they do not have a certificate to prove that they have mastered this skill. This is an action that is expected of CHWs in the clinics however, they are not permitted to perform this task in the community. When referring back to Chapter Two, (section 2.4) the roles of CHWs stipulate that these workers are expected to conduct a simple screen for potential health risks. Their scope further states that they are to identify and manage health problems. Taking the vital signs of patients could be understood by CHWs to be included in their tasks.
- CHWs would like more training in the field of screening children with developmental delays as they are often unsure of when a child has a delay.
- The management of mentally ill patients in the community also contributes to fear, frustration and uncertainty as they (CHWs) have never been trained in this area.

The second sub-category in this section namely the *referral process* (see Figure 4.13), led to the evolving of the following two **themes** that both relate to **attitudes**:

- When patients are screened at their homes and referred to the clinic, most of them do not have transport to take them to the clinic.
- Physiotherapists could assist CHWs in the screening and referral process in order for them to render an improved service.

The final sub-category in this section is *discouragement* (see Figure 4.13), with the following **themes** relating to **perceptions** and **attitudes**:

- CHWs run the risk of being attacked by dogs, rapists, gangsters, contracting TB and HIV or being injured by mentally ill patients.
- Many of the CHWs felt that their salary was not sufficient. They have families to support and work a full day and given the potential risks of going out into the communities they felt that their salaries should be adapted.
- There is no allocated room or office space for CHWs at the clinics where they can sit and write their notes or eat their lunch. They are often made to feel like outsiders and as if they are in the way of clinic staff.

- CHWs have nowhere to keep confidential patient files and they are obliged to store them at their homes. One participant stays in a small room and keeps the records under her bed (DoH Free State province should address this ethical issue urgently).
- No support is given to CHWs with regard to treating mentally ill patients. These patients are often extremely violent and attack CHWs while they are working.
- A lot of empty promises are made by clinic sisters and "people in charge", for example that they will be issued with stationary and uniforms, yet these promises have not yet realised.

Highlights of Category Six

Many barriers were identified by participants that, in their opinion, hinder the promotion of health and the prevention of illness in the communities, complicating their task as CHWs in fulfilling their role and also in interacting with physiotherapists. Figure 4.14 below lists the highlights that were documented within Category Six.

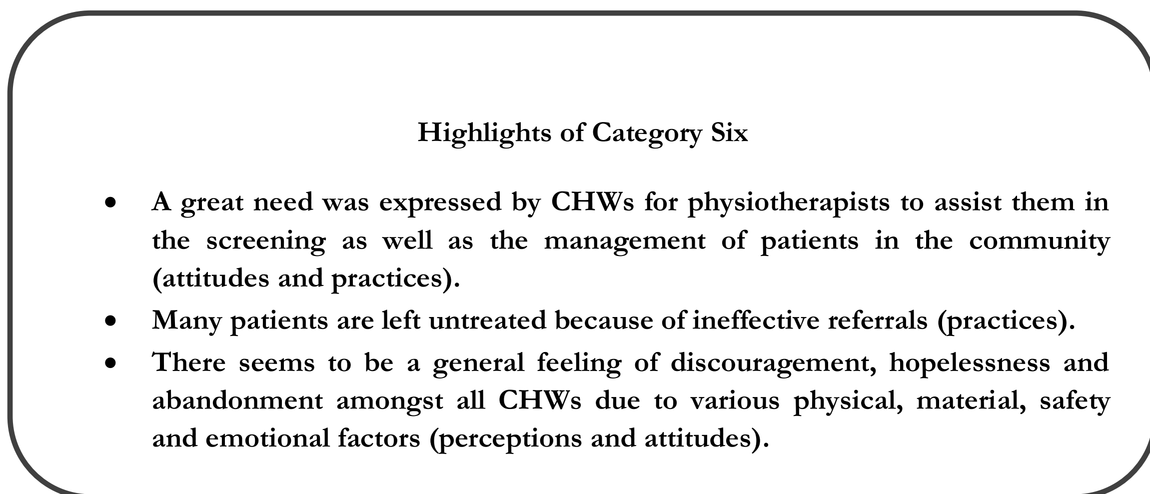


Figure 4.14: Highlights of Category Six

4.4 SUMMARISING COMMENTS

In this chapter a wide spectrum of data were displayed with the highlights of each category provided as a short summary at the end of the category, indicating the perceptions, attitudes and practices of CHWs. This once again highlighted the most important aspects as mentioned by participants during the focus group interviews. In conclusion the following perceptions, attitudes and practices were further identified as common themes across two or more categories and are included below as a summary of the main findings from this study.

- CHWs play an important role in health promotion and the prevention of illness by providing educational information to community members (chronic diseases, hygiene and HIV).
- Although, in their opinion, CHWs have had thorough training in the field of maternal and child health, they all feel that the rest of their training was insufficient and require additional practical training (also from physiotherapists).
- Besides exercising the elderly and mobilising bedridden patients (stroke), CHWs have a very limited understanding of what physiotherapists' roles are in health promotion and prevention of illness. Many CHWs perceived physiotherapists to fulfil the same role as psychologists who attend to mentally ill patients in the community.
- There is a definite lack of communication between CHWs, physiotherapists and clinic sisters and that hinders effective interaction and referral between these parties.
- Shortages of physiotherapists who go out into the clinics prevent quality service delivery to the members of the community as well as sufficient interaction with CHWs.
- A general attitude of hopelessness, discouragement and feelings of not being appreciated or respected by clinic sisters are experienced by the majority of CHWs who were interviewed.

4.5 CONCLUSION

The findings (as presented in this chapter) provided significant insight into the world of CHWs and their perceptions, attitudes and practices on aspects relating to their role, as well as their interaction with physiotherapists pertaining to the promotion of health and the prevention of illness in the communities they serve. A deeper understanding of their feelings, fears and frustrations became evident after sub-categories and themes started to emerge. Findings obtained from the focus group interviews gave the researcher a glimpse of the world as experienced by CHWs in the communities.

The next chapter will include an in-depth discussion of these findings, relating it to existing literature, identifying limitations and making recommendations as a result of this research study. The discussion of findings obtained will be presented as a separate chapter as is often the preference in qualitative research (Burnard *et al.* 2008:432).

5. CHAPTER 5: DISCUSSION

For this study the researcher opted to present findings obtained by discussing it as a separate, linking chapter, as literature states that in qualitative research, findings could either be discussed in the findings section, or presented as a separate discussion chapter (Burnard *et al.* 2008:432).

As outlined by the South African DoH, CHWs are assigned specific responsibilities within the new re-engineered PHC plan that is currently being piloted in SA (see 2.1; *2.2.3*; 2.3; 2.4). In accordance with these responsibilities, CHWs fulfil an important role in the promotion of health and the prevention of illness. Findings from this study will give an inside perspective on the perceptions, attitudes and practices of CHWs in the Thabo Mofutsanyane district as experienced in their everyday lives, allowing the reader to gain more insight into their circumstances whilst serving the community.

5.1 QUANTITATIVE, DEMOGRAPHIC FINDINGS

The quantitative, demographic findings are discussed in the next section, elaborating on findings from the demographic questionnaire within the context of current literature. To be able to identify barriers for CHWs it is important to qualify their workload, gender distribution and years of experience.

5.1.1 Distribution of CHWs

As could be seen by the distribution of participants in the five municipalities included in this study (see 4.2 and Table 4.1), the maximum number of CHWs was 11 in the Setsoto municipality, and the least in Phumelela with only three CHWs. The other three municipalities (Dihlabeng, Nketoana and Maluti) actively employed between five and six CHWs. Each CHW is expected to oversee approximately 250 families in the community (see 2.4), but with only a few CHWs employed in a municipality (i.e. Phumelela) the workload increases and more households are added to the workload of each worker. Surveys conducted in 2012 indicated the total households in the Phumelela municipality being 12 888 (Phumelela Local Municipality 2012:20), calculating that each of the three CHWs would oversee 4 296 households, as opposed to the suggested 250 (Schneider 2012:15). Although the number of households seen by each CHW in SA is in line with that of other countries (if compared to countries like Bangladesh, Kenya, Burkina Faso and Nepal) (see Table 5.1 below), the health demands of the communities are nevertheless still high and CHWs face challenging workloads as they see to the health concerns of large rural communities (Perry *et al.* 2013:25). This could thus have a negative impact on the

quality and accessibility of services as foreseen by the South African DoH at the outset of this initiative.

Although the numbers of CHWs to serve a population remain a challenge, many efforts are being made, not only in SA, but worldwide to bring health care to the communities. The United Nations International Children's Emergency Fund (UNICEF), in conjunction with the American Red Cross is currently driving an initiative across Africa where their aim is to train and employ one million health workers to relieve the growing burden of disease in the continent. Seven countries that have been included in this campaign are Nigeria, Kenya, Uganda, Malawi, Burkina Faso, Senegal and Liberia (UNICEF 2013:1) (also see *2.2.2*). Initiatives such as this by UNICEF and the American Red Cross support the realisation of the importance of health care on community level and is not a new phenomenon, as it was officially addressed with the Alma Ata declaration in 1978 (see 2.1; *2.2.1*). With the growing burden of disease and rising poverty levels this drive to bring health care to people's homes, understandably enjoys much attention worldwide (*2.2.1; 2.2.2*). In addition, Table 5.1 below illustrates a few of the similarities and differences with regard to CHWs between various countries that have implemented community health care systems.

Table 5.1: A comparison between CHWs in different countries

	South Africa	UNICEF countries named above	Kenya	Burkina Faso	Bangladesh	Brazil	Pakistan	Nepal
Known as	CHWs	Health Workers	CHWs	Health Workers	Shasthya Shebikas	Health Care Workers	Lady Health Workers	Health Workers
Number of households per CHW	250 (ideally)	250	500-1000	400	1100	75-200	27	555
Team members	• Professional nurse/clinic sister • Environmental health practitioners • Health promotion practitioners • CHWs (see *2.3.1*)	Only CHWs with a supervisor	CHWs only	CHWs only	CHWs only	• Medical practitioner • Dentist • Qualified nurse • Social worker	CHWs only	CHWs only

(RSA DoH 2012:6; UNICEF 2013:7-22; Perry *et al.* 2013:2-25)

5.1.2 Gender distribution of CHWs

The majority of CHWs included in this study were female (84%) as opposed to only 16 % males. Although the recruitment criteria do not specify any preference to any particular gender, the trend of females outnumbering male CHWs seemed to run throughout all five municipalities included in this study.

This phenomenon of CHWs being mainly women is not unique to SA. The assumption would generally be that because the concept of community health on the African continent initially resembled many of the roles of a midwife, assisting with birth and breastfeeding, many CHWs were mature females (Lehmann *et al.* 2004:7). In Bangladesh and Pakistan all CHWs are also female as men are not eligible for recruitment (Perry *et al.* 2013:2-3 and 25) (also see Table 5.1). The reason for the exclusion of men from these programmes in predominantly Muslim countries is because it is believed to be inappropriate for a man to visit a family in their home. This may be another reason why the CHWs employed in Africa are predominantly female, as many African countries follow the traditions of Islam (Mehryar 2004:1).

Another interesting fact with regards to CHW gender preference is also evident for Somalia, where the majority of CHWs were initially male, dispensing medication to the members of the communities, but not communicating details to the mothers e.g. causes of dehydration and the prevention of many illnesses. Male CHWs had no direct contact with the mothers, as it were the fathers who would rush to the clinics to collect medication. The government of Somalia derived a new strategy where a woman had to be part of a CHW team who would act as an informant of relevant important information and instructions to members (mothers) of the community (Lehmann *et al.* 2004:7-8).

5.1.3 Work experience of CHWs

An average of 2.5 years' experience exists for all the participants that filled out the demographic questionnaires as part of this study (Figure 4.1). The participants with the most experience as CHWs were those workers who have been employed since 2011 when the re-engineered PHC plan was first piloted, therefore having three years' work experience. The conclusion could be drawn that most of the CHWs who signed up for participation in the re-engineered PHC plan when it was first introduced in the piloted districts are still employed and fulfilling their roles in serving the communities.

As mentioned in *2.5.3* literature links various barriers such as inadequate technical support and supervision, transport, accountability, infrastructural support and financing to CHWs possibly resigning from their duties (Lehmann *et al.* 2004:17). Other reasons for dropping out may be attributed to the risks of contracting illnesses like TB and HIV, which would, in turn result in CHWs being unable to work as stated by Kranzer *et al.* (2010:224).

5.2 QUALITATIVE, FOCUS GROUP INTERVIEW FINDINGS

The qualitative focus group interview findings are discussed in the next section, elaborating on findings from the focus group interviews within the context of current literature. The discussion will follow the outline of each of the categories and its specific sub-categories, referring to perceptions, attitudes and practices as they emerged, as identified in Chapter Four of this research dissertation.

5.2.1 Category One: Perceptions, attitudes and practices of CHWs on health promotion and prevention of illness and their role therein

5.2.1.1 Sub-category 1: Providing educational information (Practices)

Findings obtained and presented in Chapter Four revealed that the first sub-category focusses predominantly on the practices of CHWs regarding their role in the promotion of health and the prevention of illness.

The first perception with regard to health promotion and the prevention of illness that was strongly emphasised by study participants was the role of providing information to community members. With regard to the prevention of illness, the CHWs included in this study inform members of the community about diseases like TB and HIV, its signs and symptoms, how it is contracted and spread, as well as possible treatment options for these diseases. This is clearly displayed in the quotes from study participants included below.

"*We talk a lot to our patients about HIV and TB and we encourage them to go for regular testing to know their status in time.*"

"TB is very prevalent. Some people are informed, but I feel they are not informed enough. That is why we have health talks about how it is spread, how it is cured, that it is an infectious disease but it can be cured and controlled."

Interestingly this point emerged very early in each of the focus group interviews and is clearly in line with available literature on this topic. As mentioned in 2.4, Boutin-Foster *et al.* (2007:61) state the role of any CHW as being that of educating the community on health issues, informing them about risk factors and thus promoting health and preventing illness. A study on the role of CHWs performed in Northeast Brazil also showed that these workers, whether paid or volunteers, trained or untrained, all spend a great amount of time on conveying information regarding health promotion and prevention of illness (Kahn 2008:52). CHWs in Kenya are in fact responsible for teaching about health in their schools, (Lehmann *et al.* 2004:11) a concept that could also be of great benefit if implemented in SA, because an informed youth would become an informed community and many illnesses and diseases could possibly be prevented.

Besides education with regard to diseases such as HIV and TB, great effort within community health programmes also gets put in to educate community members about, amongst others family planning, birth control and baby and child monitoring (see 2.4). These were also included amongst the intended outcomes of the re-engineered PHC plan in SA and referred to by study participants in this study (see *4.3.1.1*). In addition, CHWs all felt sympathetic to the poor circumstances experienced by the communities, having very little food and money. A great deal of their work is done with much compassion as can be seen with the emphasis placed upon promoting healthy lifestyles, personal hygiene and clean living spaces, together with teaching the community to plant and eat fresh vegetables with high nutritional value. In the African countries of Nigeria, Ghana, Tanzania, Mozambique and Zimbabwe, typical roles and responsibilities of CHWs are stipulated as health education and information on nutrition (Lehmann *et al.* 2004:11), thus in accordance with what is seen in the piloted municipalities (see 2.3 and 2.4). Linked to nutrition, all the participants mentioned their concern for their patients who are unable to consume medication due to the fact that they have no food in the homes and certain medication may only be taken after a meal.

Furthermore, the communities hold their elderly members in high regard and therefore CHWs in SA spend a lot of time educating and informing the families of the elderly, weak or bedridden on how to take care of them. These caretakers get taught about pressure sores and where to identify these sores, how to turn the patients in the bed and the importance of getting them to sit in a chair and mobilise if possible.

Lastly, in the unfortunate cases where someone in the community is attacked and/or raped, it is the responsibility of the CHWs in SA to inform such a victim of the procedures at the police

station and hospital following the attack/rape and that he/she may not shower or wash as tests have to be performed on such a victim.

5.2.1.2 Sub-category 2: Mother and child health (Practices)

CHWs provided answers relating to the second sub-category that also focusses on their practices regarding *mother and child health*.

Whilst conducting the focus group interviews it soon became apparent to the researcher that much time was spent on this subject of mother and child health in the training of the CHWs. This topic always enjoyed the most elaborate discussions and opinions and CHWs were extremely confident when discussing this section of their work within the communities. When referring back to the roles and responsibilities of CHWs as stipulated by the re-engineered PHC plan (see 2.4), it can be assumed that this area of the work done by CHWs also falls under health promotion and the prevention of illness (CMT 2011:7), and that mother and child health takes high priority in the effort to decrease mortality rates.

CHWs indicated that they spend a great amount of time encouraging young expectant mothers to breastfeed, informing them of all the health and financial benefits of breastfeeding, as well as establishing quality bonding time for mother and baby. Some CHWs also mentioned that they teach mothers to carry their babies in a "Kangaroo" sling as opposed to strapping them to their backs as is the custom in many South African cultures. The former also promotes bonding between mother and child.

It is also considered part of a CHW's work to check the clinic charts of every child in the homes visited by the CHWs, in order to ascertain whether the immunisations and clinic visits are up to date. Mothers are informed of the importance of the "Road to Health" charts and are also made aware of the seriousness of timeous immunisations for children. An interesting fact in literature states that in countries like Ghana, Nigeria and Tanzania it is within the responsibilities of CHWs to immunise babies in the homes that they visit (Lehmann *et al.* 2004:11).

As far as women's health is concerned, CHWs included in this study often hand out referral letters to women encouraging them to undergo regular "*Pap*" smears, along with educating them about the importance of these tests in order to prevent illness.

SA is certainly not alone in its drive to improve the health of mothers and children, as can be seen by numerous projects throughout the continent of Africa (see *2.2.2*). In Nigeria CHWs were responsible for driving a project where women were empowered to take control of their reproductive health, as well as encouraged to exclusively breastfeed their young (Lehmann *et al.* 2004:13). Ghana followed the example of Nigeria and CHWs (females) soon became known as "*Health Mammies*", who infiltrated communities and slowly but surely won the trust of women in the villages, educating them about women's health and child care (Lehmann *et al.* 2004:13).

The "Safe Motherhood Initiative" was started in Uganda in order to monitor safe pregnancy in the communities, educating and informing mothers-to-be about risk factors and general care of themselves and their babies. Rwanda and Tanzania are also countries that regard mother- and child health as extremely important and focus the roles of CHWs on informing mothers about factors relating to women's health, family planning and child care (Lehmann *et al.* 2004:14).

5.2.1.3 Sub-category 3: Taking the clinic to the community (Practices)

Once again this sub-category describes the practices of CHWs in fulfilling their role of promoting health and preventing illness.

Referring back to the declaration of Alma Ata as mentioned in 2.2, it was explicitly stated that health care should be brought to the masses that are not in a position to readily obtain medical attendance (WHO 1978:1). This initiative was the formal establishment (although many informal community projects had been running across rural areas globally) of CHWs who were expected to bridge the gap between the community and health care (WHO 1978:1). CHWs included in this study also gave evidence of them visiting the homes of the community members in order to then inform them about the various services that are available at the local clinic, for instance child vaccinations, pregnancy screening and HIV testing, thus taking the clinic to the community. This is in line with the role of CHWs in the USA who are also expected, according to their contractual responsibilities, to provide health education and information on how the community can access health services (O'Brien *et al.* 2009:264).

Although the discussion with regard to *taking the clinic to the community* could include various aspects, the main focus of the discussions from CHWs included in this study was around the dispensation and/or monitoring of adherence to medication within their communities (see *4.3.1.1*). This would for this reason then form the basis for the rest of the discussion included in this section.

In some of the municipalities it is expected and permitted for CHWs to take medication to the patients' homes. This was also a point of complaint as the other participants mentioned that there is seldom enough medication at the clinics and also that they (CHWs) are not trusted to deliver medication to the patients at their homes. The ambiguity arises then as these CHWs are permitted and expected to administer the same medication to the patients at the clinics. Referring back to the role description for CHWs by the RSA DoH (CMT 2011:7), it does not by any means mention the administration of medication to any patient (see 2.4). The confusion on the part of CHWs can however be acknowledged as certain municipalities expect them to deliver this service, whereas they are all expected to perform this duty within the various clinics.

CHWs also perform the duty of following up on how regularly and correctly patients are taking their prescribed medication. As mentioned earlier in this chapter, many of the patients are unable to consume their medication because of a lack of food in the home. Many patients also simply stop taking their medication because they deliberately avoid the long queues and extensive waiting time at the clinics. Other patients do not have transport (or money for transport) to get to the clinics and subsequently discontinue their medication. Other factors influencing the adherence to medication also exist and are substantiated by the following comment from one of the study participants.

"*The clinic is very far, sometimes people get robbed on the way to the clinic.*"

When CHWs visit patients at their homes, these issues are identified and documented and the CHW then explains the importance of adherence to prescribed treatment, convincing these "*defaulters*" to return to the clinic and resume treatment despite the difficulties as mentioned above. Frustration was however evident as CHWs felt that they could support the community by taking their medication to them and assist them in avoiding the difficulties that existed.

"*We are able to take the clinic to the people.*"

A study that was performed in 75 villages in western Kenya recruited 75 CHWs from those areas and trained them to become the key driving force of medication for Schistosomiasis (Bilharzia) (Omedo *et al.* 2012:1065). Kenya experienced great challenges with the control of this particular illness because, although medication was available, it was being stored at local facilities (clinics) and not accessible by the masses most in need of treatment. Through this initiative most patients ever recorded received medication and an overall decline in reported infections was noted. Kenya is currently developing countrywide programmes that mobilise CHWs to participate as mass drug distributers to the poor rural communities (Omedo *et al.* 2012:1065). This study

proved that CHWs have a much larger coverage and are able to reach the masses that are in dire need of medication. CHWs in SA are however not permitted to distribute medication yet as it does not fall within their responsibilities (see 2.4).

A similar research study in Uganda undertook to distribute medication for neglected tropical diseases (like Schistosomiasis) to rural villages in the North-west and South-eastern parts of the country. Success rates were unfortunately not as high as in the Kenyan study, as the delivery of these drugs was inconsistent and inadequate (Parker and Allen 2011:1). The researchers did not, however recruit CHWs for the distribution, but advertised for volunteers. One of the reasons why the desired outcome was not achieved was documented as a lack of remuneration for these volunteers (Parker and Allen 2011:11).

5.2.2 Category Two: The perceptions, attitudes and practices of CHWs regarding the role of physiotherapists in health promotion and the prevention of illness

5.2.2.1 Sub-category 1: No/little knowledge about physiotherapy (Perceptions)

Findings on this sub-category strongly describe the perceptions of CHWs regarding the role of physiotherapists in the community.

It became apparent during the focus group interviews, and especially when asked this question, that CHWs are not familiar with the exact scope of profession of physiotherapists, which influences these participants' perception of the importance of physiotherapy.

"*We don't really know what physiotherapists do with patients.*"

The answers provided furthermore made it clear that some participants confused physiotherapy with psychology, therefore having an inaccurate perception.

"*The purpose of a physiotherapist is to help the psyche [sic] patients to become more focussed, to take their meds, to be clean and to become more informed.*"

CHWs (16%) included in this study would remark that the role of physiotherapists would mainly be to counsel or attend to the mentally unstable, depressed or "stressed" patients in their communities. Surprisingly a few CHWs (6%) from different municipalities were actually under the impression that the main task of physiotherapists are to encourage male community

members to have circumcisions. Five of the participants (16%) simply stated outright that they did not know what physiotherapists do and one participant commented that physiotherapists had no role to play in promoting health and preventing illness in the community.

A study conducted in South-eastern Nigeria in 2012, researching the obstacles to optimal physiotherapy services in a rural community found that 45.8% of CHWs in that area had never heard about physiotherapy before (Igwesi-Chidobe 2012:6). More disturbingly, 85.2% of the community had never heard of physiotherapy either, a community that presented with 49% of the households that suffered with mobility problems (Igwesi-Chidobe 2012:4). In line with the findings from Nigeria, this study also highlighted the lack of knowledge with regard to the role of physiotherapy from CHWs employed within the included municipalities. This could negatively influence referral of patients to physiotherapy within the re-engineered PHC plan as well as the interaction between CHWs and physiotherapists in this PHC plan.

5.2.2.2 Sub-category 2: Teaching/Training (Perceptions, attitudes and practices)

Perceptions, attitudes and practices are all described in sub-category two as relating to *teaching/training*.

The remaining CHWs (62%, excluding the 38% mentioned above) were unanimous about the fact that physiotherapists play a major role in teaching and training (see *4.3.1.2*). During the focus group interviews quite a few of the participants suggested that physiotherapists could teach CHWs how to administer medication to their patients. This however once again confirms the lack of knowledge of CHWs about physiotherapy, as it does not fall within the scope of profession for physiotherapy to perform this (see 2.6 and 2.8).

Other participants did, however comment that physiotherapists have a lot that they could teach the community and themselves (CHWs) regarding patients in the community who have suffered a stroke and are immobile, the elderly who are weak and bedridden, parents with disabled children and the families who are taking care of loved ones who suffer from chronic illnesses. It was mentioned in one focus group that physiotherapists have the skills and knowledge to manage all the "serious cases" in the community and that CHWs would like to learn these skills in order to feel more confident when helping these individuals in the community.

Quite a number of participants in all five of the focus groups agreed that by teaching and training CHWs as well as the community about diseases, causes, risk factors, warning signs and symptoms, many illnesses could certainly be prevented in the rural communities.

"*Train us on how to treat them, how to talk to them. We have no basic skills how to treat or speak to them or how to relate to them.*"

"*We need more training please the people don't trust us. If you can give us training it will give us a better chance for health promotion.*"

"*If you train us and give us all the information, people will trust us and not be afraid because they are still too scared to ask for information.*"

A definite need for teaching and training of CHWs and the community was identified with this discussion, which in certain cases could be provided by physiotherapists, even though many CHWs do not fully understand the scope of physiotherapy.

5.2.2.3 Sub-category 3: Mobilisation of patients (Perceptions)

Regarding the mobilisation of patients, the perceptions of CHWs are addressed in this sub-category.

Interestingly the majority of CHWs who participated in the focus group interviews all agreed that physiotherapists play a big (if not the only) role in mobilising patients who are unable to walk, for instance patients with amputations, those who mobilise with crutches, patients that are in wheelchairs and those people who are weak and bedridden. The most important role of physiotherapists according to the CHWs is to exercise patients who have suffered a stroke and to assist them to move. As was stated in section 2.6 and 2.8, this description falls within the scope of profession for physiotherapy as outlined by the WCPT (2011:2). In their view this is one area where physiotherapists are actively involved in promoting health and could actively interact with CHWs in the community.

It was also mentioned by CHWs in this study that physiotherapists could offer exercise classes for the elderly residents in the community, assist children with developmental delays who are not walking by a certain age and also organise splints and orthotic devices for children with deformities.

Although all of these comments are applicable to the role of physiotherapy, it is rather unfortunate that those services are the only ones being experienced or expected in the rural communities of SA when the scope of physiotherapy has so much more to offer. As acknowledged health practitioners, physiotherapists are trained to perform a wide array of interventions (see 2.6; 2.7) towards the common goal of promoting health and preventing illness. Mostert-Wentzel *et al.* (2013:19) confirm this argument and state that community physiotherapy in SA is not optimally effective due to factors such as a lack of knowledge of what physiotherapists' roles are in patient care and community health care. Ideally physiotherapists should act as general health practitioners impacting strongly on the immense burden of disease experienced in SA. The authors concur that when physiotherapists perform health services in the communities according to their scope of profession, desirable outcomes such as the promotion of health and community education are being achieved, which support global and national policies (Mostert-Wentzel *et al.* 2013:25). Even doctors working in the communities were ignorant about the role physiotherapy plays in community health care (Paterson *et al.* 2007:289).

Differing from SA, physiotherapists in India are actively involved in patient examinations, diagnosing conditions and intervention practices in order to heal impairments and disabilities in the communities. Besides improving ambulation of immobile patients, these physiotherapists are known in the rural villages of India as therapists who assist community members in improving their functional abilities and quality of life in many areas of well-being (Kumar 2010:13). The scope of profession in India specifies that these physiotherapists are responsible for increasing movement potential (as is perceived by CHWs in this study), promotion of health and prevention of illness, treatment of ailments and rehabilitation of chronic conditions (Kumar 2010:15; 16). A great amount of time is also spent on care for the elderly where education about healthy aging, prevention of falls and risk management fall under the roles of physiotherapists.

Like the perceptions, attitudes and practices of CHWs who participated in this study, Indian physiotherapists are mainly responsible for supplying callipers and supportive devices to the immobile. Lectures on topics like obesity, pre-diabetes, arthritis and other chronic conditions are presented by physiotherapists in rural communities in India, along with respiratory programmes for chronic obstructive pulmonary disease (COPD) and osteoporosis. All these responsibilities of physiotherapists in India line up directly with those described by the WCPT (see 2.6; 2.7). By informing CHWs in SA about the physiotherapists' roles in the community, it could create awareness in the communities of SA and benefit the patients in need of treatment.

5.2.2.4 Sub-category 4: Support (Attitudes)

The sub-category of *support* predominantly focusses on the attitudes of CHWs.

The CHWs expressed a need in terms of physiotherapists to follow up patients who were treated by them whilst hospitalised and later discharged. The attitudes were that this action would support CHWs in their task and give those CHWs more insight and understanding of the patient and his/her condition. Participants noted that patients and relatives could not always relay accurate details pertaining to procedures performed in hospital, which often leaves CHWs unsure of how to proceed at home. Literature is sewn with articles proving the importance of follow-up physiotherapy treatment, especially regarding conditions like stroke and respiratory illnesses (Askim *et al.* 2012:5). A qualitative study performed in the UK investigating the reasons for non-compliance of patients found that non-compliance with physiotherapy is extremely common once patients have been discharged (Campbell *et al.* 2001:132). Patients do not realise the benefits of exercise or adherence to their home programmes and caregivers simply do not have the time or motivation to follow through. This vicious cycle could lead to patients losing faith in their full recovery (Campbell *et al.* 2001:137). Follow-up visits from physiotherapists could counteract these negative responses and when accompanied by CHWs, these workers could continue the treatments on a regular basis, thus counteracting the negative impact of non-compliance as mentioned in the study by Campbell *et al.* (2001:137). This could thus become a viable option within SA, as also suggested by the CHWs in this study, to better serve the community and improve health outcomes.

Besides following up on discharged patients, CHWs also voiced that physiotherapists could assist them in the communities in different ways (e.g. training, visiting patients with them) which would afford them the opportunity to deliver a better service.

"*We are only coming with a little bit of knowledge [sic]. We don't know what to do. We don't have knowledge about treating patients with stroke [sic]. We want to know.*"

In line with this and referring back to the responsibilities stipulated by the WCPT, physiotherapists in PHC are expected to give advice, support and supervise other health care workers (see 2.6). Complying with this responsibility would not only prevent deterioration of

patients' conditions once they are discharged from hospital, but also give CHWs a feeling of support, which are not currently experienced as such by CHWs included in this study (see Table 4.3).

5.2.3 Category Three: The perceptions, attitudes and practices of interaction between CHWs and physiotherapists within the community

5.2.3.1 Sub-category 1: Teamwork (Attitudes and practices)

Attitudes and practices are described in this sub-category relating to the interaction between CHWs and physiotherapists.

Linking onto the previous theme of follow-up treatment post-discharge, CHWs once again expressed their request for physiotherapists and themselves to work together as a team in order to continue the treatment of patients when they are discharged from hospital. Because of a great need for support and encouragement felt by CHWs, noted during the focus group interviews, themes of teamwork, two-way communication and a feeling of belonging emerged every time a topic was discussed.

"*The physios can accompany us to the wards where we work to see the people who never come to the clinic. To provide help there and then for our patients*."

These CHWs also mentioned their need of a comfortable and effective line of communication between themselves and physiotherapists in order to discuss specific patients and also to ask for advice about a case.

"*There is a need for them to come along, we must work together*."

One example named by the participants was that they (CHWs) could regularly report back to physiotherapists regarding the progress of their mutual patients.

Much research has been done on the benefits of inter-disciplinary interaction within communities (see 2.10), and Canada is on the forefront with encouraging health care workers and practitioners to work as a team (Nolte 2005:1). They have found that collaboration between these parties benefit the community members as well as the health care professionals. Canadians

believe that teamwork in this regard leads to best practice and that collaboration is value adding to their PHC system. An initiative by the Canadian PHC Transition Fund is currently developing a framework for collaboration that encourages better cooperation between health care workers and health practitioners (Nolte 2005:1).

McCallin and McCallin (2009:61) also state that teamwork is vital for successful outcomes in health care as health facilitators from all backgrounds work together towards problem solving, coordination of treatment plans, learning from each other and interacting with the communities. They furthermore state that interaction between health care providers is now a WHO priority and concur that in current times interaction and teamwork between health care providers are no longer an option, but crucial for effective patient care. Challenges to interaction are described by this study as factors relating to communication difficulties, not understanding the other practitioners' roles, not understanding the culture and norms of other practitioners, inability to resolve conflict and to tolerate differences (McCallin and McCallin 2009:62) (also see 2.10). It is suggested that professionals already working in the field of physiotherapy should consider their skills of inter-disciplinary collaboration (McCallin and McCallin 2009:61). As mentioned in 2.9, physiotherapy graduates complete a compulsory year of community service after they have graduated, creating the perfect environment in this year to establish interaction between physiotherapists and CHWs and combining their skills to improve health outcomes in the communities.

5.2.3.2 Sub-category 2: Training in the clinical field (Attitudes and practices)

Responses by CHWs relating to *training in the clinical field* describe the attitudes as well as the practices of these CHWs.

The suggestion was made by participants that physiotherapists could train their team leaders on all aspects pertaining to the most prevalent cases seen by CHWs on a daily basis (see *4.3.1.3* as well as Table 4.4).

"*We must make a support group so that physios can train us how to help our patients [sic]. We must be a chain.*"

A great need for practical demonstration of treatments in the homes of the patients was voiced because the setting and lay-out of the homes sometimes complicates treatment of patients for CHWs. The rehabilitation of stroke patients, those who had had amputations, fragile and weak patients as well as those with spasticity are to name but a few of the cases they would like

practical demonstrations of. The issue of support was once again mentioned repeatedly and also that a need exists for support groups that consist of CHWs, physiotherapists, clinic sisters and team leaders. Physiotherapists could then also give tutorials on different illnesses and topics during these support groups.

Additional to PHC teams, the WHO has released a document where "skills mixing" was explored, as an alternative. Nurses in a rural community were trained and developed by other health care professionals beyond their current responsibilities, resulting in skills development of workers in the PHC setting rising up above their capabilities (WHO 2012:22). Globally there is a shortage of health care workers (lay workers and professional personnel) to deliver a service to the communities who are often the people most in need of health care and the least to receive any. The WHO has therefore stated that it is now more important than ever to develop the available minority of health care workers to levels beyond their initial training and responsibilities. In doing so we could move closer towards the worldwide goal of achieving a better quality of health care to the community, reduce costs and facilitate access for all people (WHO 2012:4). Skills mixing (or task sharing) could lead to CHWs taking on a new role and make a tremendously positive contribution to health outcomes. Strict supervision will of course accompany such a shift in paradigm and careful planning and training will have to forego this initiative. Given the request by CHWs the opportunity already exists for interaction between physiotherapists and CHWs in this regard and through teamwork, interaction, effective communication and referral between physiotherapists and CHWs a stronger impact could be made in community health.

Skills mixing, as discussed above, has however not been approved in SA as yet, and is not included in either the scope of profession for physiotherapy (HPCSA 1976:7) (also see 2.6 and 2.7) or the roles as set out for the CHWs in SA (CMT 2011:7) (also see 2.4).

5.2.3.3 Sub-category 3: Shortage of physiotherapists in the community (Attitudes and practices)

Sub-category 3 describes the attitudes and practices of CHWs.

CHWs feel that because there are very few physiotherapists who provide a service in the community, interaction with these therapists is very challenging. As opposed to the 3-12 CHWs assigned to a particular municipality (which is already too few for the workload), only one

physiotherapist ever visits the clinic and cannot possibly meet the needs of the community, or attend to patients who need their skills in their homes.

"We need more physio hands."

Unfortunately there have also been disappointing incidents where CHWs have made appointments for their patients to see the physiotherapist at the clinic on a specific day and, after organising transport to get there, the physiotherapists had left. These occurrences leave CHWs with a very negative and distrusting attitude toward the physiotherapists and the profession as a whole. Given the tremendous difference physiotherapists could make in the health of community members, these professionals should work hard at acknowledging these facts and counteracting negative experiences with positive replacements. As no formal inquiry about the views and opinions of CHWs in the field regarding various issues had been launched, experiences like these are never heard of and thus simply go unattended to, whereas something could be done to correct the shortfalls and barriers and henceforth deliver a better service to the community. This study aims to bring factors such as these to the attention of the readers, giving them a glimpse into the world of CHWs currently working in the communities, as well as providing readers with a deeper understanding of how these CHWs perceive aspects pertaining to the promotion of health and the prevention of illness (see 3.3).

Literature states that there is a vast shortage of skilled health professionals globally who are prepared to serve in the community. Compulsory community service has thus been introduced by many countries, of which SA is one (see 2.9). South African graduates spend one year of compulsory community service which aims to relieve some of the pressure in the communities due to a shortage of skilled physiotherapists who are able to assist in taking health care to the people (Mostert-Wentzel 2013:19).

From the physiotherapists' point of view, there are factors that hinder their enthusiasm to work in the community, as reported by undergraduate students in a study by Mostert-Wentzel *et al.* (2013:22). Students experienced the language barrier as being problematic, as well as understanding the cultural background of the local community. As mentioned in section 2.9, O'Toole and McConkey (1998:311) stated that physiotherapists should learn the skill of adapting to a foreign environment as well as the art of being flexible in order to be effective in their duties in the community. Linking the hunger for knowledge and teaching expressed by CHWs in this study, the health outcome for South African communities could improve dramatically if these two parties could join hands and work together. CHWs are appointed within their communities,

therefore they speak the local language and are familiar with the culture and traditions, whereas physiotherapists are skilled and trained in all the different components of rehabilitation and they, in turn, could share their knowledge and skills with CHWs.

5.2.4 Category Four: Barriers experienced by CHWs in fulfilling their role and in the interaction with physiotherapists

5.2.4.1 Sub-category 1: Lack of support (Perceptions and practices)

The sub-category named *lack of support* reflects strongly on the perceptions and practices of CHWs.

As stated before (see *4.3.1.4*) the participants all commented on the lack of communication with physiotherapists. Literature clearly shows that ineffective communication is one of the major causes for community health care to fail (see *2.5.3*). Besides this barrier, others were also mentioned namely a lack of training for the specific requirements of their day-to-day work, the absence of a team leader who could support them and who would act as a reference with whom these CHWs could discuss patients that are challenging.

"*We struggle without a team leader. It has been more than three years now and we are still being side-stepped. Nobody tells us what's going on.*"

Another point that was raised in all five the municipalities was the issue of communication between CHWs and staff at the clinics.

"*We refer our patients to the clinics but there is no help for them there.*"

There seemed to be no positive communication at all and every participant commented about this limitation and how negatively it was experienced by all of them. Some participants described the relationship between themselves and clinic sisters as problematic and this prevents effective interaction between the two parties, resulting in a less successful outcome for the people of the community.

Physical needs were mentioned in this sub-category, namely shoes (many CHWs have to walk far to the homes of patients), stationary, name badges (for credibility and trust), uniforms, transport, umbrellas (for heat and rain) and bags in which to carry their files.

"*We will look much [sic] more presentable to the community if we have these things.*"

These requests seem insignificant to a person not familiar with the scope of their (CHWs) every day task, yet these issues have never been voiced or addressed, as many participants commented that nobody has ever spoken to them about their needs. Linking onto the point about a team leader, the comment has to be made again that these workers have no support system (that they are aware of) and nowhere to turn, given the less than ideal relationships with clinic staff.

Barriers that make the work of CHWs dangerous such as dog attacks, rape and assault, as well as general abuse by certain patients were identified and contribute to CHWs risking their safety in order to fulfil their daily task.

"*We constantly feel threatened. What will become of us if we are injured?*"

The matter of remuneration was raised and certain participants stated that their spouses were not in favour of them delivering a service to the community for the salaries that they are paid and running the possible risk of attack. Many participants were the breadwinners in the home and felt that they struggled to make ends meet. Should any harm come to them fulfilling their work in the community their entire income would be stopped.

Officers from the DoH visited the municipalities in 2011 and CHWs were told about a municipal ward-based team which comprised of a doctor, a social worker, a sister and a team leader who would act as a support system to aid CHWs in the new venture of the re-engineered PHC plan (see 2.3). Since then (2011) not one of these CHWs has seen any of these team members (besides the clinic sister) or has been contacted by anyone asking about their welfare. CHWs are left to fend for themselves and they feel that they have been left to cope by themselves and forgotten about. A few of the comments made by participants were:

"*Nobody asks us "What are you doing*," or "*What are your challenges*?"

"*Nobody ever takes us seriously."*

Literature states that barriers such as a lack of support and/or structure, poor remuneration, insufficient training, task allocation and supervision contribute to CHWs in other countries dropping out and not continuing their careers (WHO 2007:14 -15). When referring back to the study performed by Lehmann *et al.* (2004:17), a clear resemblance with barriers experienced by CHWs in SA is noted (see *2.5.2*). As was shown in 4.2, most CHWs who were initially employed by the DoH are still working in their communities and have not dropped out yet.

Lehmann *et al.* (2007:21) states that CHWs have a great service to offer the community by implementing certain health care principles that would impact the health outcomes in SA tremendously, but these CHWs require careful selection, training and continuous support. Supervision and a strong support system are two non-negotiable requirements for a successful health outcome. Even in well-developed community health drives such as the Indian *Mitanin* programme the issue of support and supervision is still unresolved, particularly in remote areas (Lehmann *et al.* 2007:21). As literature clearly points out there is a tremendous need by CHWs in the communities for a support system whom they meet with regularly, whom they can trust and confide in, which does not seem to be the case in the current South African system (see *4.3.1.4* and Table 4.5). Physiotherapists if included as part of the PHC team could assist in addressing this worrisome situation if they interact with and support CHWs.

5.2.4.2 Sub-category 2: Service delivery to patients (Perceptions, attitudes and practices)

Perceptions, attitudes and practices of CHWs are described in findings relating to sub-category 2.

This discussion proved to be the lengthiest of all as CHWs simply lay all their concerns and difficulties regarding their role in the community on the table. The majority of issues experienced by CHWs were regarding the clinic set-up, appointments, referrals and interpersonal relationships with clinic staff. Valid points were made as will be discussed in this section and if addressed would lead to a much more positive attitude and feeling of support by CHWs (see Table 4.5).

CHWs are of the opinion that their input and contribution toward community health outcomes are overlooked and ill respected. Besides community members mistreating them, they suffer much verbal abuse from clinic sisters. Comments were made that sisters do not respect, appreciate or value them as persons or the work they do. When they (CHWs) refer patients to the clinics for treatment, these patients are mistreated by sisters after waiting for several hours to be seen by them. Communication between CHWs and clinic sisters is stressed and often leads to conflict (see *4.3.1.4*).

Many clinics run out of medication and the patients are informed to go home and return at a later stage. Patients on chronic medication, for instance anti-retroviral medication, terminate their treatments because of the long queues at the clinics and they simply never return.

The common feeling perceived in all five focus group interviews was that of being taken for granted and not being appreciated and recognised for the work they (CHWs) do. Noted

previously was also the lack of support and leadership perceived by these CHWs. The danger arises that these feelings may in future cause these eager workers to abandon their calling and give up (see *5.1.2*). This is a scenario a country like SA cannot afford with its growing burden of disease, financial constraints and existing shortage of health workers to serve the masses.

A publication by Schneider *et al.* (2008:184) stated that tension between CHWs and clinic sisters already existed in 2008 when the roles of CHWs were investigated in the Free State province. Nurses were extremely reluctant for CHWs to be issued uniforms, made to feel unwelcome and as if they did not belong in the community. The feelings of being rejected and taken for granted were documented by CHWs during this investigation and when asked why they did not leave their jobs they responded with the argument that they love what they did and keep hoping things would change (Schneider *et al.* 2008:185).

Participants repeatedly mentioned the problem of a shortage of CHWs and physiotherapists to meet the growing demands in the community (see *4.3.1.4).* As mentioned previously, community members are growing increasingly reluctant to visit their local clinics and there is a huge demand for patients to be treated in their own homes. There are simply too many patients and too few health workers, making a quality one-on-one treatment session with each patient (as is the ideal) almost impossible (see *5.1.1*).

Frustration was experienced by CHWs in terms of what they are trained to do and what they end up doing all day. These workers were well-trained in HIV screening and ante-and post-natal care, yet they are kept busy for the biggest part of their day doing registrations of all the households. They thus do not get to do what they were trained for. Some confusion exists amongst CHWs as to what they are permitted to do in terms of the distribution of medication. Initially they were expected to take chronic medication to the homes of the people and administer it to them. This practice was later terminated and patients do not accept the cessation of receiving their medication at home. These chronic patients in turn verbally abuse and insult CHWs if they arrive empty handed.

"*We try our best but we get criticized all the time. People put their dogs on us and expect food, medication and money from us.*"

Regulations stipulate that patients are compelled to present proof of identity to CHWs before they may receive any treatment. In many instances patients are from neighbouring countries like Lesotho and have no birth certificates. When service is refused to these patients they often turn violent and conflict arises between them and CHWs (see Table 4.5). The same reaction from

members of the community is elicited when CHWs do not bring them food, clothes, medication or money as mentioned above.

Many fraudulent schemes by dishonest members of the public have left the community very sceptical of CHWs and mistrust is often a hindering factor. CHWs are seldom permitted to enter the homes of the people without some sort of identification letter stating their purpose. A great feeling of empathy was detected throughout all five the interviews when CHWs spoke about the dismal financial state of their patients. These people could not take their prescribed medication because they have no food to eat beforehand. The researcher noted the frustration and helplessness of CHWs regarding this situation.

Returning to physiotherapists, CHWs all concurred that physiotherapists could assist them in promoting health and preventing illness in the community if these physiotherapists are placed within the community service full time and agree to accompany CHWs to the homes of the people. Past experiences with physiotherapists were perceived in a very negative light, where patients who had been referred for physiotherapy had to return home without receiving any treatment.

> "*They don't come near our patients. When we want to ask something they say they only work according to appointments. We must make the appointment. They don't want to hear us. They don't even know us.*"

These strong perceptions, attitudes and practices of CHWs have a tremendously negative influence on the service delivery of CHWs and deserve attention in order to sustain the long term viability of the re-engineered PHC plan. Schneider *et al.* (2008:186) suggest that the working conditions of these valuable assets (CHWs) be improved as well as their basic entitlements.

5.2.4.3 Sub-category 3: Training (Perceptions)

Regarding the third sub-category namely *training*, findings mainly focus on the perceptions of CHWs.

Participants agreed upon the statement that their training was too short and too long ago. Now that they encounter real life situations and are employed full time they expressed the need for continued education, refresher courses and on-the-job practical training (see *4.3.1.4)*.

Previously the training of CHWs has differed within all the various provinces in SA and no standardised training curriculum could be identified. This resulted in different emphasis placed upon certain aspects of health care in different communities (Languza *et al.* 2011:1). With regard

to the training of the currently employed CHWs, two areas that received great attention throughout all the districts were mother and child health, as well as HIV management. All CHWs were thoroughly informed and taught about most aspects concerning these areas and as could be seen from discussions during the focus group interviews, these were the areas where CHWs felt most confident.

Lehmann *et al.* (2004:8) also state that very limited information about the precise detail of CHW training in SA exists. Literature briefly mentions the training provided to CHWs in other African countries and is included below.

- Maradi, Niger offer a 7-10 day course covering general health, emergencies and referrals. Every year these workers embark on a refresher course where new aspects of health care are introduced.
- Training in Tanzania is 3-6 months.
- Nigeria offers training for three months in groups of 20 and provides refresher courses after two years.
- In Somalia, CHWs are trained for seven weeks with four to six months practical training in the clinical field with one week refresher courses every six months. Training in Somalia use role-play, drama and song and is well accepted by CHWs.

5.2.5 Category Five: Benefits of fulfilling their role and interacting with physiotherapists

5.2.5.1 Sub-category 1: Improved teamwork (Attitudes and practices)

When discussing aspects relating to *teamwork*, findings that were obtained reflect the attitudes and practices of CHWs.

As mentioned numerous times previously (see *2.2.2*; 2.3 and *2.5.1*) SA and the rest of the world suffer a tremendous shortage of CHWs and physiotherapists who are available to attend to the growing health needs of the communities. A valid point was made by CHWs that if physiotherapists joined hands with them, interacting and collaborating they could share the workload and provide a more effective service to members of the community (see *4.3.1.5*). Given the current situation in SA where clinics are over extended and where patients wait in long queues for several hours this suggestion could relieve tremendous pressure off these clinics. Patients also stand to gain from interaction between these two parties, if they are treated in their homes and thus save transport fees to and from the local clinics and/or hospitals. Clinics would

subsequently only attend to emergency cases as is the intention of the DoH with the re-engineered PHC plan. A combined effort is believed by CHWs to lead to better health outcomes and more referrals to applicable disciplines (see Table 4.6).

Because of their close involvement with members of the community, CHWs are in an optimal position to screen and refer patients for physiotherapy and other members of the multi-disciplinary team. With immediate referral and treatment, community members will receive speedy attendance and no longer suffer prolonged illness and deterioration.

"*The whole community will benefit if physios come with us and train us and people will save money for transport. When we work together the illness will become less.*"

"*With physiotherapists on our side, we won't feel so lost and our job will become more easier [sic].*"
(This participant got emotional when making this comment, highlighting the feelings of CHWs)

Also mentioned before, CHWs feel that they have a lot of knowledge and rehabilitation skills to learn from physiotherapists and the latter could offer valuable advice and support to CHWs (see *4.3.1.5*). The need for practical in-the-home demonstrations has been discussed in detail in an earlier section of this chapter (see *5.2.3*). Some of the comments made were:

"*Let's work together, give us the tools and the training then we can fight together.*"

"*We can get all the knowledge from physiotherapists and pass it on to the community. There's supposed to be a link between us, they can teach us how to move our patients.*"

As can be seen by the comments made, CHWs did not respond with general remarks on the benefits of their contribution in the communities as they felt these issues were discussed in the first category when they elaborated about their role in health promotion and the prevention of illness. Although the roles (educating the community, providing information, taking services to the homes and mother-and-child care) these CHWs play in the communities are of great benefit to the communities they serve (see *5.2.1*), the participants instead opted to discuss the benefits of interaction with physiotherapists. This could possibly also be seen as another re-iteration of their need for support.

Literature is very clear that intervention initiatives to improve the health outcomes of underserved areas will only succeed if there is collaboration between the different cadres of health workers (Kruger 2006:1067). CHWs are especially valuable contributors because they are

familiar with the cultural environment and customs of a community, and their participation creates co-ownership and improves chances of sustainability (Kruger 2006:1067). Physiotherapists have skilled training regarding all aspects of rehabilitation and combined with the benefits stated by Kruger it would be a very positive combination.

A study performed by Viswanathan *et al.* (2009:4) investigated the health outcomes of CHWs in various communities in the USA. Specifically referring to outcomes relating to the promotion of health and the prevention of illness, findings showed that CHWs' participation in the community proved to be an effective tool in improving knowledge and education, as well as other health related outcomes regarding illness prevention. Although CHWs are by definition not skilled professionals, these workers are a natural bridge between the community and health care (Viswanathan *et al.* 2009:13). Just like in the USA, the communities in SA can greatly benefit from such a "*bridge*" if CHWs and physiotherapists work together.

5.2.6 Category Six: Additional comments

5.2.6.1 Sub-category 1: Uncertainty (Perceptions, attitudes and practices)

All data relating to *uncertainty* are described as perceptions, attitudes and practices of CHWs.

CHWs expressed feelings of uncertainty regarding the screening and treatment of patients and made the suggestion (as mentioned earlier in *5.2.5.1*) that physiotherapists could visit the homes of patients with them (CHWs) and demonstrate screening methods, treatment options and techniques (see *4.3.1.6*). None of the participants felt confident about the screening and referral of patients, and expressed the need for additional training regarding these issues. One field of concern specifically was mentioned namely the screening of children with developmental delays, where CHWs repeatedly stated their need of more training on how to assess and refer these patients (see Table 4.7). Participants also mentioned their uncertainty of children's milestones on more than one occasion.

Another area of uncertainty was identified as the knowledge of the families and caretakers of patients with illnesses and/or weakness. The general observation was made that most families do not have any idea how to manage their patients at home. Again CHWs commented that physiotherapists could play a vital role in assisting in this regard by teaching the families basic skills and techniques. This need expressed by CHWs falls directly within the scope of profession for physiotherapists as was seen in section 2.6, namely that physiotherapists are required to

"*interact with other health professionals, families and caregivers and communities where goals are agreed upon, using skills and knowledge unique to physical therapists"* (WCPT 2011:1).

In all five of the focus groups participants complained about the management of the mentally ill patients in the community. Many CHWs were under the impression as stated in section *5.2.2.1* and also in *4.3.1.2* that physiotherapists' primary role is to manage these patients. Participants commented that they were terrified of encountering such a patient when they were alone and saw this as a huge barrier in performing their duty.

CHWs were trained to take the vital signs of patients as part of their initial training programme, but some participants felt unsure of their exact responsibility regarding this task, as they are not permitted to do this in the homes of the people, yet expected to take vital sign readings in the clinics (see Table 4.7).

"*They make us do it at the clinics, but we are not permitted to do it in the homes. Now we just don't take it anymore and just give the medication in the clinic*."

They also commented that they would like a certificate or acknowledgement to certify that they have mastered the skill and completed the training in taking vital signs.

SA is one of the countries with the highest need of affordable accessible health care, yet our screening and referral systems have to be re-investigated, given the above comments made by CHWs (see Table 4.7). CHWs have the potential to reach the majority of underserved community members but these workers are currently still underused and restricted in the services they could provide (Sanders 2012:3). Other countries like Thailand and Rwanda have successfully implemented training strategies to empower CHWs to perform basic screening, intervention and prevention actions, especially in the field of maternal and child health. Sanders (2012:3) also states that these CHWs are supported by clinic staff and health centres. Pneumonia is currently treated with antibiotics administered by CHWs in 21 countries in Africa. This disease is responsible for 11.7% of infant deaths in SA (Sanders 2012:3). CHWs in SA are restricted from treating intestinal worms, let alone a severe condition like pneumonia. Nepal and Ethiopia are two countries where CHWs administer antibiotics. On investigation of the quality of service and the health outcomes of those countries, it was found that both remained high. Sanders (2012:3) states that if CHWs are not trained and permitted to perform more tasks in the communities the re-engineered PHC plan is unlikely to achieve its goals.

With the shortage of qualified medical practitioners available to serve the communities where diseases like HIV/AIDS and TB are claiming the lives of many, it would make sense to utilise CHWs to assist in fighting these illnesses by training them to perform more duties than before. Task shifting will make it possible for CHWs to perform actions previously done by nurses, for example taking vital signs and screening patients for serious illnesses, provided that they receive adequate training in these areas (Viswanathan 2009:13). These actions do not form part of the current scope of responsibilities for CHWs (see 2.4), but may later be included after consideration is given to the shortage dilemma experienced in the communities of SA.

5.2.6.2 Sub-category 2: Referral process (Attitudes)

Comments made during the focus group interviews regarding the *referral process* are categorised as attitudes.

Participants expressed the concern of transport for their patients whom they screen in their homes and refer to the clinics. Most of these families live in poor circumstances and many do not even have food to eat, let alone money for transport to- and from the clinic and/or hospital. CHWs subsequently argue that there is no point in referring patients for additional treatment, even though it may be desperately needed because if treatment is not performed in the homes of the people it will not happen at all (see Table 4.7 and *4.3.1.6*). CHWs felt that collaboration and teamwork in this regard would be in the best interest of the entire community. Once again frustration was shown with staff at the clinics (see Table 4.7), this time with the clerks who make the appointments:

> "*The clerks don't understand the referral process so our patients don't get seen when we refer them*."

The WHO recognises the barrier of transport in poor rural areas and suggests that clinics, district hospitals, inter-disciplinary staff members and CHWs work out effective and appropriate protocols for referral and treatment options that will provide a solution to this issue of travel expenses (WHO 2010:46). As mentioned in *2.5.3,* a referral system that is poorly structured and ineffective could lead to the collapse of the entire community health care operation, as seen in Peru (Brown *et al.* 2006:4).

The South African DoH has also issued a revised PHC facility supervision manual where it acknowledges the tremendous problems that are being experienced with the current referral system. This department set out to investigate options of improving the process of patient referral within the PHC setting, including CHWs referring their patients for additional treatment

(RSA DoH 2009:2;3). Although this manual was revised in 2009, well before the re-engineered PHC plan was developed, the barrier of an ineffective referral system was identified, yet sadly not dealt with according to the comments made by participants in this study.

5.2.6.3 Sub-category 3: Discouragement (Perceptions and attitudes)

The sub-category of *discouragement* reveals the perceptions and attitudes of CHWs.

Regarding the theme of *discouragement* CHWs felt that there were many contributing factors leading them to feel hopeless and discouraged while fulfilling their role in promoting health and preventing illness in the community. Barriers as identified in section *4.3.1.4* and Table 4.7 contribute to CHWs feeling unappreciated and worthless.

"*The sister will cut you off if you are trying to say something. Later you start to lose interest in your work. They take us as lower persons [sic]. The sister thinks we want to know more than her and then she gets very angry. Then we don't show our skills anymore.*"

A study on the motivation of CHWs conducted in Uganda showed similar perceptions when these workers were interviewed on what they perceived as weaknesses in their employment structure (Brunie *et al.* 2014:114). Not surprisingly it was concluded in that research study that issues like transport, support, training and recognition, supplies (e.g. t-shirts, identification badges and stationary) and self-efficacy were what needed to be addressed as these were seen as the major contributors to the success of improved health outcomes (Brunie *et al.* 2014:104), the biggest of these challenges being transport and remuneration. These findings are in total agreement with this research study.

As demotivation seems to be a common occurrence amongst CHWs, the above mentioned study in Uganda also suggested that public acknowledgement and appreciation would improve the motivation of CHWs to keep delivering their best service (Brunie *et al.* 2014:113). These factors are similar to those mentioned by CHWs in this study and as stated in the research by Brunie *et al.* (2014:13), these issues are the ones that lead to CHWs resigning from their duties, leaving the communities in desperate need.

5.3 SUMMARY OF DISCUSSIONS

Summarising the data discussion, all aspects relating to perceptions, attitudes and practices were grouped together as pertaining to each category.

5.3.1 Perceptions

- Little or no knowledge about physiotherapy.
- Teaching/ training – physiotherapists have many skills to teach CHWs.
- Mobilisation of patients- the greatest, if not the only role of physiotherapists.
- Lack of support.
- Service delivery to patients.
- CHW training (in their field) was too short and too long ago.
- Uncertainty of correct screening and referral procedures.
- Discouragement.

5.3.2 Attitudes

- Teaching/training- CHWs felt that they have a lot to learn from physiotherapists.
- Support- unsure of post-discharge treatment of patients.
- Teamwork- CHWs expressed a desire to belong to a team.
- Training in the clinical field- CHWs felt unsure of treatment procedures in the homes of community members.
- Shortage of physiotherapists- CHWs had negative attitudes due to a few disappointing incidences.
- Service delivery to patients- CHWs were trained to perform certain tasks, yet not permitted to carry out these tasks in the communities.
- Improved teamwork- Positive about the benefits thereof.
- Uncertainty- CHWs did not feel confident about screening and referring patients.
- Referral process- Frustration with the clinic set-up.
- Discouragement- A general attitude of negativity was noted regarding various aspects relating to the role of CHWs in the community.

5.3.3 Practices

- Providing educational information.
- Mother and child health.
- Taking the clinic to the community.
- Teaching/training- Teaching CHWs new skills would empower them to feel more confident in their work.
- Teamwork- A two-way communication system would be established where CHWs could report back to physiotherapists regarding the progress of their patients.
- Training in the clinical field.
- Shortage of physiotherapists in the communities- CHWs cannot effectively reach and manage all the households requiring health care. If more physiotherapists are placed in the districts better health outcomes would follow.
- Lack of support- CHWs expressed physical needs such as shoes, files and stationary which, in their opinion, would lead to a more effective service. Dangers and remuneration were also mentioned which are regarded as barriers preventing CHWs from delivering the best service to the communities.
- Service delivery to patients- The clinics are too full, short staffed and often without medication and therefore patients do not comply with treatment regulations and refrain from visiting the clinics for check-ups.
- Improved teamwork- With the cooperation of and interaction with physiotherapists more households could be reached.
- Uncertainty- CHWs are uncertain about whether procedures such as taking the vital signs of patients (as was included in their training) are permitted, as they are expected to perform this task in the clinics, yet forbidden to do so in the homes of patients (see section 2.4).

5.4 PERCEPTIONS, ATTITUDES AND PRACTICES AS IN ALIGNMENT WITH RESEARCH OBJECTIVES

As stated in 3.3 the aim of this study was to determine the perceptions, attitudes and practices of CHWs in the Thabo Mofutsanyane District with regard to health promotion and the prevention of illness, as well as inter-professional referral or cooperation with physiotherapists related to this. The figures below depict the four research objectives and the perceptions, attitudes and practices of CHWs pertaining to each research objective respectively.

Objective 1: To establish the perceptions, attitudes and practices of CHWs regarding their role in health promotion and the prevention of illness within the communities

Practices

Providing educational information
Mother and child health
Taking the clinic to the community

Figure 5.1: Perceptions, Attitudes and Practices pertaining to Research Objective 1

Objective 2: To establish the perceptions, attitudes and practices of CHWs concerning the role of physiotherapists in health promotion and the prevention of illness within the communities

Perceptions

No/little knowledge about physiotherapy

Teaching/training

Mobilisation of patients

Attitudes

Teaching/training

Support

Practices

Teaching/training

Objective 3: To establish the possibilities for interaction between CHWs and physiotherapists with regard to health promotion and prevention of illness

Attitudes and Practices

Teamwork
Training in the clinical field
Shortage of physiotherapists in the community

Figure 5.3: Perceptions, Attitudes and Practices pertaining to Research Objective 3

Objective 4: To identify barriers and benefits to CHWs in fulfilling their role in health promotion and prevention of illness

Perceptions

Lack of support
Service delivery to patients
Training
Uncertainty
Discouragement

Attitudes

Service delivery to patients
Improved teamwork
Uncertainty
Referral process
Discouragement

Practices

Lack of support
Service delivery to patients
Improved teamwork
Uncertainty

Figure 5.4: Perceptions, Attitudes and Practices pertaining to Research Objective 4

5.5 LIMITATIONS

A limitation in this research study would be that it was only conducted in one province of SA (as mentioned in 5.3), namely the Free State, and the findings obtained can therefore not represent the perceptions, attitudes and practices of CHWs in the whole of SA.

Another limitation would be that the focus group interviews were conducted in English, which is the official language of employment for CHWs, but not the mother tongue of the participants. Some valuable data may have been missed due to the language constraints. The interpreter could have also misinterpreted some comments as they were made in Sesotho and then translated by the interpreter to English. The researcher could have planned for language constraints before conducting this study.

In the Phumelela district municipality only three CHWs participated. This is a very small number of participants if compared to other municipalities who took part, but as these three participants were the only CHWs employed in that area, data was collected following the precise same steps as with all the other municipalities that had more participants (see *3.9.2*).

Lastly, the fact that the researcher did not accompany CHWs to their daily tasks in the field, but simply interviewed them at the clinics could be regarded as a limitation to this study.

5.6 RECOMMENDATIONS

5.6.1 Recommendations for improving interaction between physiotherapists and CHWs

In view of the observation that many of the participants in this study were unaware of what the role of physiotherapists are in the community, as well as the statement of one participant who clearly remarked that physiotherapists have no place in community health care, there is a tremendous task resting on physiotherapy as a profession to promote and educate CHWs about their work. When CHWs see the benefit of cooperating with physiotherapists, interaction is likely to follow, leading to improved service delivery to the community. It is therefore recommended that group talks and promotional drives be introduced by stakeholders such as the SASP, RuReSA or even by the new graduates completing their community service year. Such events would not only target CHWs, but also doctors and nurses in the community to inform

them of the scope of profession for physiotherapy, avoiding a situation like that in Nigeria where community members and doctors were not familiar with physiotherapy (see *5.2.2.1*).

As mentioned numerous times (see *4.3.1.2; 4.3.1.4)*, the issue of support and teamwork carries great weight with CHWs and participants expressed in no uncertain terms their need for belonging to a support structure where physiotherapists and CHWs could link hands and work together. Planned training sessions where physiotherapists address questions from CHWs about real life situations and conditions, much like case studies, could be presented on a regular basis at the local municipal clinic, followed by interactive group discussions where stories could be shared and suggestions made. Such informal sessions would break down barriers between the two parties and strengthen ties as both these groups have plenty to offer in terms of promoting health and preventing illness. It is further recommended that the South African DoH investigate the role of community service physiotherapists and the possible linkage with CHWs in the re-engineered PHC plan to address some of the concerns with regard to support and teamwork. A strong base of qualified physiotherapists would be needed in rural areas as a driving force in order to establish such an initiative.

5.6.2 Recommendations for CHWs

Despite perceptions such as a lack of support, ineffective service delivery to patients and insufficient training that affect their attitudes toward their work negatively, participants still showed great commitment and passion for the health of the community and spoke empathetically about their patients' conditions. It is recommended that issues such as these (i.e. training, lack of support, ineffective service delivery), together with the need for identification badges, remuneration, lack of respect and acknowledgement be addressed by the South African DoH as these are all potential factors that could lead to CHWs dropping out as was the case in other African countries (see *5.1.3*).

It is further recommended that CHWs and nursing sisters and clinic nurses should sit around a table and discuss the frustrations of these workers accompanied by a team leader and mediator where many of the feelings of not being appreciated, valued or heard could be resolved.

Lastly, it is also recommended that the South African DoH be made aware of the other barriers experienced by CHWs as revealed in this study (see *5.2.4*) in order to address these issues where possible. A report summary of this research study could be presented by the researcher to this department highlighting important issues as discovered by means of the focus group interviews.

5.6.3 Recommendations for future research

Given the fact that this study was only conducted in the Free State, the researcher would recommend that it should be investigated further in other districts in SA as well in order to compare findings and draw conclusions from similarities and differences between the districts. The suggested follow-up research studies should firstly be conducted in all ten of the remaining pilot districts of the re-engineered PHC plan, as rolled out by the South African DoH. Data obtained would provide valuable insight into the perceptions, attitudes and practices of CHWs in the rest of SA, pertaining to health promotion and the prevention of illness.

The facilitator could also include diagrams or picture charts as an additional tool when asking the focus group questions in order to minimise possible misinterpretations due to language constraints.

5.7 CONCLUSION

Concluding the chapter on the discussion of findings obtained in this study the reader was given an insider perspective/view of aspects pertaining to the work of CHWs who are currently employed in the communities as part of the piloted re-engineered PHC plan of the South African DoH (see 1.1 and 2.1). These findings were also discussed within the context of similar situations worldwide.

Findings with regard to the role of CHWs in SA (as referred to above) were also supplemented by reporting on the innermost feelings and concerns as experienced by the participants on how they see their work in the community, the role of physiotherapists, interaction between these two parties, as well as barriers and benefits of their work. Discussions on each sub-category reflected on the perceptions, attitudes or practices, or a combination of these concepts.

Finally, the findings from this study can potentially prove to be of great value in order to assist the DoH in adapting the re-engineered PHC plan to improve the success of the health plan as well as the health outcomes of the communities in which these CHWs work.

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PERSONAL COMMUNICATIONS

Bezuidenhout, M. Co-founder of RuReSA. 2013. Telephonic conversation with reference to the role of physiotherapists in PHC on 3 June 2013.

Lorenzo, T. Associate Professor and Programme convener for Disability Studies Postgraduate Programmes, School of Health and Rehabilitation Sciences, Faculty of Health Sciences, University of Cape Town, communicated via email between April 2013 and August 2013.

Schneider, H. Head of the School of Public Health, University of the Western Cape communicated via email between April 2013 and May 2013.

Schoon, M.G. Head of clinical department (Medical) UFS Maternal & Child health task team communicated via email and consultation sessions between November 2012 and June 2014.

ANNEXURE A

Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness.

Focus Group Interview Questions

1. **What do you as a CHW perceive as health promotion and illness prevention within the community that you work, and what is your role therein?**
2. **What do you as a CHW perceive as the role of physiotherapists in health promotion and illness prevention within the community that you work?**
3. **How do you see the possibilities for interaction between you and the physiotherapists with regard to health promotion and prevention of illness within the community that you work?**
4. **What do you perceive as barriers in fulfilling your role and in the interaction with physiotherapists within health promotion and prevention of illness?**
5. **What do you perceive as benefits in fulfilling your role and in the interaction with physiotherapists within health promotion and prevention of illness?**
6. **Do you have any additional comments with regard to your role as CHWs and your interaction with physiotherapists within health promotion and illness prevention in your community?**

ANNEXURE B

Short Demographic Questionnaire

Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness.

Please complete the following questionnaire by marking with an X in the appropriate block(s) or write down your answer in the space provided.

Section A - Demographic Information

For Office Use

[ ] [ ] [ ] 1-3

1. What is your gender? [ ] Male [ ] Female — [ ] 4

2. What is your age? ______________________ years — [ ] [ ] 5-6

3. In what municipality are you currently working? — [ ] 7
   - Setsoto [ ]
   - Dihlabeng [ ]
   - Nketoana [ ]
   - Maluti [ ]
   - Phumelela [ ]

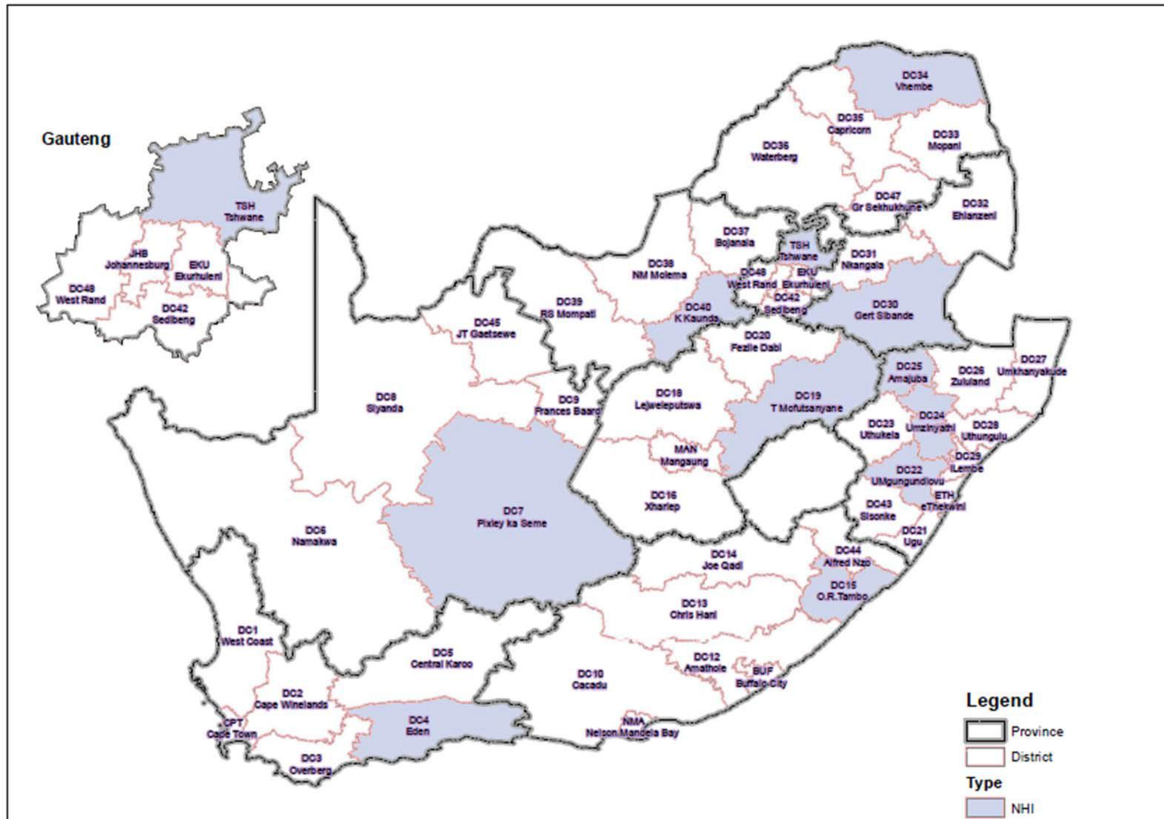
4. How long have you been working as a community health worker?

   ______________________________________ — [ ] [ ] [ ] 8-10

Thank you for you participation.

ANNEXURE C

PHC Piloted Districts in SA



ANNEXURE D

Information Document

Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness.

Dear Participant

I, Zanette Lowe am doing research as part of my MSc degree at UFS on the perceptions, attitudes and practices of community health workers' (CHWs) role in health promotion and prevention of illness, as well as their interaction with physiotherapists. In this study I want to gain a deeper insight into the perceptions, attitudes and practices of CHWs regarding these aspects.

I am inviting you to participate in this research study.

The study will involve the following:

You as a CHW will be asked to complete a **short demographic questionnaire** in Afrikaans, English or Sesotho before commencement of the focus group interviews.

A **focus group interview** will be conducted in English and translated into Sesotho or Afrikaans as preferred in order to collect data on the perceptions of CHWs with regard to your role in health promotion and prevention of illness, as well as inter-professional referral and co-operation with physiotherapists related to this as part of your duties within the re-engineered PHC plan. These interviews will take place at the local clinic.

Participants should be aware that the session will be **informal** and all opinions are welcomed as pertaining to the topic.

Signed informed consent will be obtained from each participant and it will be ensured that each participant understands his/her rights, as well as that your **identities are protected (each participant will be allocated a number).** The focus group interview will be video-and audiotaped. Verbal and written consent for video-and audiotaping the session will be obtained.

The researcher will ask the questions and repeat as necessitated, keeping track of time. The session will not to exceed **90 minutes**.

There are no risks involved with participating in this study.

Each participant will be given pertinent information on this study while involved and after the results are available. Participation is entirely **voluntary** and declining to take part will not involve any harm or penalty. A CHW may **discontinue participation** at any time.

CHWs will be **refunded** for travelling costs to and from the clinic (conditions apply). No additional remuneration will be provided and no additional costs will be incurred by participants. Participants will not receive any remuneration for participating in the study.

Every effort will be made to keep personal information **confidential**, although absolute confidentiality cannot be guaranteed. Personal information could be disclosed if required by law. Views and opinions of other participants discussed during the focus group interview are kept confidential and may not be discussed with any person after the interview.

Organisations that may inspect and/or copy the research records for quality assurance and data analysis include groups such as the ethics committee for medical research.

Results of this study may be published in an accredited journal.

Contact details of the researcher are: Zanette Lowe, at telephone number 0828545411, or email lowez@ufs.ac.za. If there are any queries or ethical concerns regarding participation, please contact the secretariat at the ethics committee of UFS.

Consent to participate in research study

Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness.

I ____ have been approached to take part in a research study.

I have been informed about the study by the researcher, Zanette Lowe as part of the requirements of a Master's degree in Physiotherapy.

I may contact the researcher at 0828545411 should I have questions or concerns.

I will be asked to complete a short questionnaire, after which I will take part in a focus group interview. I will be refunded for transport costs to and from the clinic (R100 per participant).

I may contact the secretary of the Ethics Committee of the Faculty of Health Sciences of the University of the Free State if I have any questions about my rights as participant in the above mentioned study. The contact number is: 051 405 2812.

Participation in this study is entirely voluntary and I may withdraw from the study at any time.

If I agree to take part, I will be given a signed copy of consent to participate as well as a written summary of the research.

No significant personal benefit will be derived by participating in the study.

I am aware that every effort will be made to keep personal information as well as results obtained confidential, although absolute confidentiality cannot be guaranteed. Information could be disclosed if required by law.

I am aware that I may not discuss views and opinions of other participants with persons outside the group.

The study has been explained to me both in writing, as well as verbally in the language of my choice (English, Afrikaans or SeSotho).

I understand that this session will be video-and audiotaped.

Participant____________________ Date ___________________

Researcher____________________

Witness _______________________ Date ___________________

ANNEXURE E

22 Kameeldoringdraai

Woodland Hills

Bloemfontein

9301

5 August 2013

To Dr David Motau, head of the Department of Health of the Free State

Community Health Workers' perception, attitudes and practices with regard to their role and interaction with physiotherapists regarding health promotion and prevention of illness.

I am currently a Master's Student in physiotherapy at the University of the Free State. As part of the fulfilment of the degree, I have to conduct a research study. My field of interest is community health. My aim is to research what the perceptions, attitudes and practices of community health workers are regarding their role in health promotion and prevention of illness, as well as their interaction with physiotherapists within the re-engineered PHC plan of the DoH of SA. Please see an attached copy of the study protocol that has been submitted for permission.

Participation in this study is entirely voluntary and participants will be well informed and there will be no penalties for declining to take part. Confidentiality of information will be handled with discretion at all times.

Participants in this study will include all community health workers (CHWs) that are working in this capacity in the Thabo Mofutsanyane (Free State) district. The Thabo Mofutsanyane District has been divided into five smaller municipalities,

each with a clinic and community health center. It was confirmed telephonically that each of these clinics has a training room facility where the data collection for this study can be done. The five sub-municipalities are: Setsoto, Dihlabeng, Nketoana, Maluti and Phumelela. Each municipality employs 3-12 CHWs. A date and time will be scheduled beforehand when the study will be conducted within working hours of CHWs.

Initially, a demographic questionnaire will be completed by all participants in the same venue. After completion of the questionnaires, all participants will partake in a focus group discussion about their perceptions, attitudes and practices regarding their role in health promotion and prevention of illness, as well as their interaction with physiotherapists within the new proposed primary Health Care (PHC) plan. The entire session should not last longer than 90 minutes.

The study will be qualitative research. Results from this study could be implemented by the Department of Health of the Government of South Africa if the perceptions, attitudes and practices of CHWs are investigated with regard to their role in health promotion and prevention of illness, as well as their interaction with physiotherapists, by making recommendations from data obtained.

Annual progress reports as well as a brief report on study findings will be sent to your department at completion of this study. Results could be implemented and the researcher aims to publish the findings in an accredited journal. Results could be made known to participants on request.

With this letter I ask for permission to recruit CHWs to participate in my study. Ethical permission has been obtained from the Ethics committee of the Faculty of Health Sciences of the University of the Free State (ECUFS NR 174/2013) and proof thereof will be submitted to your Department before this research study is performed.

The protocol for this study will be included in the application.

Regards

Zanette Lowe

(Researcher/ Physiotherapist)

Signed___________________
Date_________________________

ANNEXURE F

ANNEXURE G