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TRAINING OF COMMUNITY HEALTH WORKERS IN WARD-BASED OUTREACH TEAMS: EXPLORING EXPERIENCES AND PERCEPTIONS IN TSHWANE DISTRICT

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Public Health (MPH) in the School of Public Health

Johannesburg, 24 June 2022

CANDIDATE'S DECLARATION

I Lifutso Motsieloa declare that this research report is my work. This work has not been submitted to any institution as a report for the examination. This report is submitted for the degree of Master of Public Health in the School of Public Health at the University of the Witwatersrand, Johannesburg.



Signature of candidate

Date: 24 June 2022

DEDICATION

I dedicate this research to my parents Ntate Peter Motsieloa and Mme Masechaba Motsieloa, for their guidance and drive to achieve the best possible in life with faith and humility.

ABSTRACT

Background: The training of community health workers (CHWs) remains a crucial component to strengthening their role in primary health care and Universal Health Coverage. South Africa has made strides to strengthen its national CHW programme; the Ward-Based Primary Health Care Outreach Team (WBPHCOT) model. Envisaged to be generalists, CHWs have a defined comprehensive set of roles within this model. This has been coupled with the establishment of an accredited national CHW curriculum to capacitate this cadre – a crucial element to the success of this programme. Several challenges have been raised regarding the implementation of the training of CHWs. Understanding the dynamics of the implementation of the training is needed to identify ways to strengthen it.

Aim: This study sought to understand the experiences and perceptions of CHWs and managers of the training of Community Health Workers in WBPHCOTs in the Tshwane district.

Methods: An exploratory qualitative research design consisting of focus group discussions with 16 CHWs and key informant interviews with 12 key informants (ward-based outreach team coordinators, outreach team leaders, facility managers, district managers, district Department of Health trainers, a Provincial Department of Health representative and trainers from non-governmental organisations) was conducted. Collected data were then transcribed and a thematic content analysis was used to analyse the data.

Results: The findings indicated that CHWs provided a wide range of services that were in line with the current objectives of the policy. Despite the mixed views about the implementation of the training, there was general agreement that the training enabled CHWs to carry out their roles and responsibilities and to respond to community needs. The identified gaps in the training included insufficient updating of the curriculum to ensure that it aligned with current information, lack of resources such as transport to training venues, and a need to build in components that are sensitive to aspects such as cultural practices or beliefs into the curriculum.

Conclusion: The study indicated that CHWs are playing a crucial role in providing the required comprehensive services in communities. The implementation of the CHWs training programme had some successes, however, some gaps required consideration to improve the provision of training. For instance, the existing CHW policies need to stipulate the minimum recruitment criteria to address significant entry-level qualifications. The study illustrated that

for any CHW training programme to achieve the intended objective, there needs to be an overall evaluation of the curriculum and the implementation to ensure its efficacy and quality.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ANC	African National Congress
ART	Antiretroviral Therapy
ASHAs	Accredited Social Health Activists
BP	Blood Pressure
CBD	Central Business District
CHW	Community Health Workers
COPC	Community Oriented Primary Care
Covid-19	Coronavirus Disease 2019
DHS	District Health System
DoH	Department of Health
DOTS	Directly Observed Therapy Short Course
EN	Enrolled Nurse
FCHVs	Female Community Health Volunteers
FETC	Further Education and Training Certificate
FGD	Focus Group Discussion
FHP	Family Health Program
FPD	Foundation for Professional Development
GETC	General Education and Training Certificate

GP	Gauteng Province
HBC	Home Based Care
HIV	Human Immunodeficiency Virus
HREC	Human Resource Ethics Committee
HRH	Human Resources for Health
HWSETA	Health and Welfare Sector Education and Training Authority
KIIs	Key Informant Interviews
KZN	Kwa Zulu-Natal
LHW	Lay Health Workers
LMIC	Low- and Middle-Income Countries
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MNCH	Maternal Newborn and Child Health
NCDs	Non-communicable Diseases
NDoH	National Department of Health
NGOs	Non-Governmental Organisations
NHI	National Health Insurance
NQF	National Qualifications Framework
OTL	Outreach Team Leader
PHC	Primary Health Care
PN	Professional Nurse

RPHC	Re-engineering of Primary Health Care
RTHC	Road to Health Card
SA	South Africa
SAQA	South Africa Qualifications Authority
SASSA	Social Security Agency South Africa
SDG	Sustainable Development Goals
SMU	Sefako Makgatho Health Sciences University
StatsSA	Statistics South Africa
T2DM	Type 2 Diabetes Mellitus
TB	Tuberculosis
UHC	Universal Health Coverage
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VHC	Village Health Communicators
VHG	Village Health Guides
WBPHCOT	Ward Based Primary Health Care Outreach Team
WBTO	Ward Based Outreach Teams
WHO	World Health Organisation

*The clinic is also referred to as Facility

CHAPTER 1: INTRODUCTION

1.1 Background

The shortage and mal-distribution of the health workforce is a primary factor that poses a challenge in ensuring adequate and equitable healthcare services provision. This crisis is more critical in developing countries (1). The World Health Organisation (WHO) Global Strategy on Human Resources for Health – 2030 (2) emphasises the importance of addressing health workforce shortages to accelerate progress towards improving health outcomes and achieving Universal Health Coverage (UHC). In this regard, many developing countries have a history of using community health workers (CHWs) to meet these health workforce challenges. Moreover, it is further recognised that there could be a limited achievement of UHC without improving the role of CHWs in Primary Health Care (PHC) and in the marginalised communities they serve. CHWs have been considered the cornerstone for PHC as proposed by the 1978 Alma Ata Declaration on Primary Health Care (1). The WHO defines them as those that "should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organisation, and have shorter training than professional workers" (3). So wide is their scope of responsibilities; they have different titles based on the country they reside in or the roles for which they are responsible for. These range from Lady Health Worker in Pakistan, Traditional Birth Attendant in various countries, Female Community Health Volunteer in Nepal to Village Drug-Kit Manager in Mali (3). Moreover, their role in the health system is crucial such that the WHO has developed guidelines to optimise CHW programmes (4). Furthermore, in 2019 the World Health Assembly emphasised how CHWs will be needed to achieve UHC and the Sustainable Development Goals (SDGs), particularly those related to eliminating preventable child and maternal deaths (5).

A large body of work indicates that CHWs improve overall health outcomes, create a link between marginalised communities and the health system, therefore reducing barriers to accessing health care (6, 7). However, despite the substantial number of countries that have CHW-run interventions, there has been cited challenges which have included issues such as

unclear roles, inadequate education and career paths, a tenuous link with the health system and poor-quality control and support - with the quality of their services being noted as sub-optimal (5, 8, 9).

Several factors have been reported to lead to inadequate implementation of these programmes (e.g., limited resources, poor supervision and management). However, one factor that remains repeatedly noted as poor and insufficient is training, which is often fragmented and provided by different service providers with non-standardised material or content (10). Although the training of CHWs is considered crucial, there has been significant variation in what exists and is available. For instance, some training programmes offer no in-service training, and if there is any form of support, it is informal, while other programmes try to provide continuous training or refresher courses (11). Moreover, it is said that CHW training programmes are seldom evaluated (12) hence the existing views regarding their quality remain questionable. Consequently, attention to training programmes and the mechanisms that can optimise the quality of CHW services remains essential.

South Africa (SA) has a history of using CHWs as far back as the 1930 and has made some strides in strengthening its contribution to its health system (13, 14). Subsequent CHW policy developments were inspired by the Alma Ata in 1978 (15). Since the 1980s there were efforts to strengthen and standardise the role of CHWs in the country's health system leading to the development of key policy directions in 2004. This was in the form of the adoption of a policy framework to guide training and remuneration (16). The revitalisation or re-engineering of PHC as a platform for the community-based sector led to the establishment of the Provincial Guidelines for the Implementation of the Three Streams of PHC Re-engineering in 2011 (17), with one of the three streams being ward-based PHC outreach teams (WBPHCOTs) whereby CHWs are central to the teams. This was followed by the draft Municipal Ward Based Primary Health Care Outreach Team (WBPHCOT) Policy Framework and Strategy in 2015, which aimed to provide a principle that could offer overall direction towards the planning and rollout of WBPHCOTs (18). Thereafter, the Policy Framework and Strategy for WBPHCOTs was released in 2017 and this aimed to ensure efficient leadership and management of the WBPHCOTs to contribute to the provision of PHC services in the country and contribute to

the success of UHC (19). This was in tandem with the establishment of a training curriculum by 2006 to solidify skills related to their scope of work (16). In line with SA's PHC Re-engineering strategy, the policy was launched to provide a step towards one common standard and scope of work for CHWs. It was therefore a bold step in regulating their roles and responsibilities, working conditions, selection, recruitment, and training. The literature review will provide a more expanded history of the CHWs programme in the South African context.

According to the current Policy framework and Strategy (19) CHWs are meant to be generalists, and their central mandate is to provide a comprehensive range of services. However, it is generally recognised that the ability of CHWs to fulfil a comprehensive set of roles will require adequate and context-relevant training to improve skills and knowledge (20). During the implementation of WBPHCOTs, several challenges were identified, and inadequate training of CHWs was identified as one (13, 14, 21). One of the Policy Framework goals is to enforce the WBPHCOTs scope of work and ensure uniformity in all nine South African provinces (19). To facilitate this goal, it notes that there will be efforts to ensure the availability of training content and methods used to capacitate CHWs to provide these comprehensive services (19). Part of the WBPHCOTs strategy was to establish an accredited national CHW curriculum, a three-phased training programme. Although an important milestone and training has been in progress since 2012, a rapid national appraisal of the implementation of WBPHCOTs showed that the implementation of the training has been experiencing a series of bottlenecks (22).

In light of these efforts in South Africa to enhance the contribution of CHWs to PHC, this study aimed to explore the experiences and perceptions regarding CHWs' training in WBPHCOT to understand the achievements and challenges experienced in implementing the training. While the focus of this research does not dwell on how PHC contributes to the National Health Insurance (NHI); which is a health financing system aimed at pooling resources to provide access to quality and affordable health services to all South Africans, regardless of socioeconomic status (23), the results could also shed light on how the community component of the three streams of PHC can be more efficient through well-defined roles and sufficient training of CHWs. The ripple effect of a well-coordinated CHW intervention through an

effective training programme can contribute positively to the broader NHI in SA to provide affordable access to health care for its population. There has been little research on this implementation to assess how training has fared in providing CHWs with the skills and knowledge required to perform their roles.

1.2 Problem statement

CHWs are an essential part of PHC. To strengthen the District Health System (DHS) and improve PHC services, evidence shows that the training of CHWs is a crucial aspect that imparts new knowledge and abilities related to their roles and aims to enhance their capacity to serve people in communities where they are working (7). In both Sub-Saharan Africa and South Asia, CHWs training is inconsistent and ineffective. In these areas, varied and multiple organisations provide CHW training programs, often rendering them disjointed as they tend to vary in duration, methodology and content (12, 24). Moreover, ongoing supportive training such as refresher courses and in-service training is reportedly infrequent (3), while the training programmes are often not assessed to determine the effectiveness of the training about CHWs' capability (12). Poor coherence and consistency across CHW training programmes are noted because LMICs struggle to achieve or improve their health outcomes through the use of CHWs (1).

The training of CHWs in South Africa has had a history of not being adequately instituted. Since the inception of the implementation of a newly set up training curriculum in 2012, it is stated that training of CHWs was inadequate, due to a lot of administrative bottlenecks especially in terms of the completion of training in one phase before moving to the next phase, including slow progression through the prescribed phases and insufficient organisation (13, 22). In another study conducted in Eastern Cape Province, it was found that CHWs and other mid-level health workers were ill-prepared for their jobs because of insufficient training (25). Where CHWs were placed they had often been found to receive little guidance, inadequate training, or support to do their work, implying that CHWs render services without adequate training (26, 27).

If CHWs are not well trained, they cannot fully achieve their roles and will not have the competence to function at the required level (26, 28). Moreover, if the implementation of training and its guidelines are not adequate, there is a chance of creating a CHWs workforce that cannot meaningfully contribute to improving patient outcomes (7, 24). Therefore, research findings in this study are crucial to identify issues in the existing training of CHWs that can be considered in policy efforts and direction to improve the role and effectiveness of CHW-provided services in the South African health system.

1.3 Justification of study

This study sought to fulfil the gap in evidence regarding the implementation of CHW training in South Africa. This is more needed as there is a global effort to achieve UHC by strengthening PHC and CHW interventions. Evidence shows that effective CHW programmes are determined by the extent of leadership, supervision and, more importantly, adequate support of CHWs (29). It is also evident that CHWs that are adequately trained and deployed result in a reduction in maternal and child mortality, the spread of HIV, TB, and malaria, and better management of chronic diseases (30). However, the evident increase of the scope of their responsibilities calls for increased support through adequate training and supervision.

Although the PHC re-engineering strategy in South Africa proposed a renewed focus on district and PHC systems, concerns over the limited resources for implementation and training deficits have been raised (31), and this research explores and highlights the roles and responsibilities of CHWs, which tie-up with their training needs. This study will add to the body of work that seeks to understand mechanisms to strengthen CHW-led interventions. It will contribute to a better understanding by policy-makers of the experiences of implementing the currently established training programme for CHWs in South Africa, thereby contributing to improving strategies for CHW training.

1.4 Study aim and Objectives

This study aims to understand the experiences and perceptions of training by Community Health Workers in Ward-based PHC Outreach Teams (WBPHCOTs).

The specific objectives are:

- To describe the roles and responsibilities of CHWs;
- To explore CHWs' experiences and perceptions of training;
- To explore relevant stakeholders' (Outreach Team Leaders, Facility Managers, District Manager, District Trainers, WBOT Coordinators, NGO representatives/trainers and Gauteng Province-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

1.5 Literature review

This section reviews the relevant literature about community health workers, particularly focussing on the scope of roles and the various training efforts in low and middle-income countries (LMICs).

1.5.1 Community Health Worker programmes in low and middle-income countries

In the context of a substantial global shortage of CHWs and inequitable distribution of the current health workforce, CHWs are regarded as part of a strategy to deal with health workforce deficiencies and lack of UHC (8, 32). In the last decade, there has been a myriad of evidence related to CHWs, which has raised a global recognition of their potential to improve population health outcomes, particularly in LMICs where there are huge health inequities (30). For over a hundred years, CHWs have been part of the health care system. Some of the early use of this cadre was in China, where large numbers of peasants were trained in health education, environmental sanitation, PHC, preventative medicine and first aid and as a result, they came

to be known as "barefoot doctors" in 1950 (10, 33). This was when there was a great need for a health workforce, with only 40 000 doctors to cater to a 540 million population (33). Ever since the 1978 Alma-Ata Declaration established a global-level recognition of the role and potential of CHWs to build on PHC, they have been seen, since the 1980s, as making a notable contribution in sustaining the urgent health workforce challenges in the environment of PHC and in achieving UHC (20). In the year 2000, the notion of using CHWs was once more reinforced in PHC as a way of attaining the World Health Organization's (WHO) global goal of "Health for All" (3), particularly as community participation was regarded as one of the fundamental ways for the success of the PHC movement (34). For this reason, there has been a revitalisation of national CHW programs in LMICs (30).

CHWs are community members who have been chosen to perform functions related to healthcare delivery despite having no formal professional training or degree (6, 35). They should be answerable to the community for their activities and supported by the health system but not necessarily part of its organisation (3). As part of the health system, they work closely with other Health Care Workers (HCWs), such as nurses and doctors, to be assigned and supported (36, 37). This makes sense if we consider that CHWs has been conceptualised as an extension and part of existing PHC facilities. They do not do their work in isolation but act as a complementary component to the already existing PHC system. This cadre is a unique type of human resource compared to other established cadres such as doctors or nurses. Their tasks are numerous, but it is their flexibility that gives them an advantage. In Afghanistan, their duties range from detection and treatment of prevalent diseases to health education and awareness, to referral and to the administration of a Health Post, which were all based on the needs of the communities (38).

There has been a substantial body of work that has provided some insight into how CHWs have, over the years, contributed to addressing priority health challenges in different LMICs. There is no doubt that CHWs have played a critical role in fighting the scourge of HIV/AIDS in LMICs. CHW-interventions targeted at HIV/AIDS have become more comprehensive, evolving from the initial home-based care programmes to support those caring for people with the disease to provide various tasks such as counselling and health promotion and education in

communities (39). Even more crucial is their role as a key resource in attaining universal health access to HIV services and treatment. It has been found that CHWs improved ART treatment and adherence in studies in Uganda, South Africa, and Haiti (39-41). The same applies to Tuberculosis. CHWs have played a central role in TB control programmes in LMICs, particularly through the community-based Directly Observed Therapy, Short-Course (DOTS). They have been involved in ensuring that patients complete their course of therapy to ensure a cure and reduction of drug resistance, to reducing stigma (42).

A myriad of current evidence shows the effectiveness of CHW intervention programmes directed at reducing mortality and morbidity in children under five years of age in LMICs (43-45). For instance, many studies have indicated how trained CHWs can effectively diagnose and treat serious childhood illnesses, including pneumonia, malaria, and diarrhoea (46). An analysis that looked at the results of published studies from Bangladesh, India, Nepal, Pakistan, Tanzania, and the Philippines showed that programmes where CHWs diagnosed and treated childhood pneumonia decreased the risk of death by 36% (47), while another review indicated that CHW-related case management for pneumonia could potentially be at 70% (48). In CHW program interventions directed at malaria case management, there has been an evident overall reduction of under-5 mortality related to malaria (49). Further studies reveal that CHWs have contributed to clinical cures in 98% of childhood cases, particularly due to the emergence of rapid diagnostic tests for malaria (50).

Countries such as Thailand, Brazil, Pakistan, Ethiopia, and India made CHWs part of their health care system to improve the delivery of health care services and continue to provide lessons on how to ensure CHWs' effective contribution to PHC and health outcomes. Through their approach, these countries have been able to achieve noticeable health gains (51). In Brazil, for instance, the Family Health Programme (FHP) has been an important pillar in the reorganisation of its Unified National Health System. An FHP team, centred on a family and community approach, was made up of a doctor, nurse, nurse assistant and CHWs for a population of 3 500 (52). The teams in specified areas were responsible for providing PHC services and making referrals to other levels of care. FHP in the Brazilian health care system

is credited for significant declines in infant mortality rates over 12 years from 1990 to 2002 (52). The Brazilian health care system managed to achieve UHC using CHWs under PHC (53).

Since 1977, Thailand has used CHWs as part of their national PHC programme; mainly made up of Village Health Volunteers (VHV) and Village Health Communicators (VHC). Nine years after their involvement in the PHC programme, both groups increased in numbers and made visible changes in the country's health care system (54). Such an increase was marked by improved dissemination of health information and health education in communities. Also, there was increased immunisation coverage, while deaths from communicable diseases were lowered (54). In India, the government also introduced CHWs in 1977 to provide health services to homes. Known as Village Health Guides (VHG), they were expected to give primary curative, preventive, and promotive health care for people to take responsibility for their health and be resourceful (55).

Despite evidence of the notable contribution that CHWs can make, large-scale CHW programmes still need to address their shortcomings which have compromised adequate scaling up of CHW programmes in LMICs and their effectiveness. Moreover, it has been noted that regardless of the highlighted achievements, the effectiveness of CHW-led interventions varies across different programs and, in some cases, are marginal (6). The WHO (4) even cited that there has been minimal success in replicating these noted best practice examples to scale, hence the need for greater evidence-based guidance on how to strengthen the effectiveness and impact of CHWs (4). This cadre has traditionally received minimal training as compared to a health care professional; they are in most cases not paid and assume a more limited scope of practice (56). For this reason, they have tended to function and exist at the margins of the policy space and in policy considerations for supporting the health system. Consequently, this has maintained some of the challenges which include, inadequate training and supervision, lack of certification hence limiting their credibility, poor logistical support such as the provision of equipment and other resources, lack of opportunities for career growth and unstable financing (56, 57). It is for this reason that one of the principles underlying the Global Strategy on Human Resources for Health: Workforce 2030 (2) is that countries should aim to plan for their human resources for health holistically rather than through a silo-ed approach in planning and

financing efforts as this results in policy fragmentation and inefficiency (2). This study focuses on the aspect of the training of CHWs, based on the premise that if this cadre is expected to provide a wide range of tasks and be effective in this endeavour, they require effective training and supervision (58).

1.5.2 Community health worker training in LMICs

CHWs need to possess the required competencies to perform their duties satisfactorily. They need sufficient initial and refresher training in new topics and skills to ensure that they provide quality health delivery services to the communities they serve (24). In LMICs, CHWs play an important role in providing health delivery services and many people who seek health care consult CHWs first as their linkage with the health care system. With the shortage of HRH, there is a need to ensure that CHWs are well resourced with the right skills and knowledge. Evidence from various countries shows that CHWs can make effective health outcomes, particularly in maternal and child health. Research has shown that even with low literacy, CHWs can identify and correctly treat most children who have pneumonia, malaria, and diarrhoea when trained with simplified guidelines, supported with supervision, and provided with an uninterrupted supply of medicines (59). When they are trained, they become skilled and knowledgeable in their work and contribute positively to improving community-based health programmes (36).

However, it is noted that the training of CHWs is not standardised in terms of duration and approaches across the different countries. In different settings, training can range from 3 days and up to 60 days and once a year refresher courses or none (24). For instance, in sub-Saharan Africa and South Asia, there is variation in duration. The training of CHWs in Nigeria for example takes place once a year (3), while that in Malawi and Rwanda is once a month. However, studies of training programmes in South Asian countries have durations that range from two days (60) to four days (61), clearly showing the significant differences. However, shorter courses in Nepal were related to in-service training, while longer courses in India were to cover new content (24). Vota, et al (10) indicate that there is enough evidence to suggest that CHWs are not effectively trained, remunerated, or retained with a lack of standardised

approaches to training, putting CHWs at a disadvantage in their duties. Further studies show the training shortcomings of CHWs. It is indicated that when training is provided, it is usually inadequate, often in large part because of the training location and from where the health workers live (3). What is clear from the literature is that there are varying levels of training of CHWs, which necessitates the need to understand not only their roles but what the training entails and how prepared the CHWs are after training.

Currently, CHW programs provide initial or pre-service training, those that provide ongoing training, and those that use a combination of both. The variation is such that some CHWs receive informal training outside of recognised training institutions while others receive formal, structured education in nationally recognised training institutions (62). As a result, there is still a lot to learn about delivering training in all of its forms in LMICs – that is, pre-service/initial training and ongoing training. While Li et al (63) opine that a prior process is required to establish a training programme for CHWs. At most, there needs to be "a policy-level stipulation of the desired goals" so that the training goals are based on well-established assumptions and information. They further note that inconsistency with both goals and immediate needs can lead to a misguided training initiative, a program that will not fulfil policymakers' demands, a system that is less inclined to support CHWs in utilizing new skills, or other undesirable outcomes (63). There are also limitations on the other end of the spectrum to understanding how best to deliver CHW training programs in LMICs. O'Donavan et al (64) opine those evaluations of the training programmes undermine the complex nature of training interventions. They note that they tend to employ a narrow approach where they are focussed on a specific area (e.g. maternal and child health) or disease (e.g. TB) as opposed to considering a holistic lens to understanding what would be effective under different conditions and settings, hence employing a realist approach to research and evaluation.

Although there is a discourse about the inadequacy of CHW training programmes, credible evidence of their effectiveness remains sketchy. Redick et al (24) note that this limitation is due to the gap in proper monitoring and evaluation designs. An evaluation of training in Malawi, Pakistan and India was illustrative of the limitations of the assessment frameworks. In Malawi, an evaluation of one of its pre-service training programmes showed that the

competency of the CHWs increased from a pre-test score of 60% to 84% post-test (65). However, a study of ASHAs indicated competence in some areas, but limited acceptable competency in priority areas (66), while the study in Pakistan to evaluate a public sector training programme indicated poor knowledge of lay health workers (LHWs), particularly in basic Maternal, Newborn and Child Health (MNCH) and neonatal resuscitation (67). Their reasoning for this variation in outcomes is that it was due to the potential time in which the evaluations took place, including the differences in the type of training curriculums (24). Regardless of the assessment limitations of training programmes, there are however global efforts to find better ways to improve the training of CHWs. The WHO (4) has provided much needed recommendations to assist countries in implementing CHW training programs (4), which will undoubtedly be most valuable globally to support CHW programs. Although the following recommendations are not exhaustive, they include the following themes:

- The selection criteria for pre-service training should consider minimum education that coincides with their mandated tasks,
- The duration of the training should take into account the scope of work and anticipated responsibilities, and pre-existing knowledge and skills,
- The methods employed should ensure a balance between theory-based knowledge and practice-oriented training while emphasising supervision-based practical experience,
- The training material and how the content is delivered should be in a language that can enhance CHWs' acquisition of the content and the skills,
- CHWs who have completed the pre-service training should be provided with competency-based certification to improve motivation and quality of care.

1.5.3 The evolution of Primary Health Care in South Africa

Primary health care (PHC) services are often the first contact for people within a public health care system. PHC aims to provide complete access to health care that meets the people's needs in an affordable manner (68). South Africa arose out of the apartheid period with an underdeveloped, fragmented and poorly funded PHC system (69). Since 1994, the African

National Congress (ANC) government envisioned a health system built on the foundation of PHC and the District Health System as promoted at the 1978 Alma Ata conference, with a system based on community health centres to meet the health needs of the whole population by improving primary care infrastructure and access to care (69). The country, through its policy reforms from 1994, established social and/or health policies that advocated for development and inter-sectoral collaborations (35). These policy developments prioritised community-based services through the introduction of what in South Africa is commonly known as the PHC Re-engineering strategy in 2011. This was to support a preventive and health-promoting community-based PHC model, using community-based outreach teams (18, 19).

A PHC model (Figure 1) was then proposed through the release of the Provincial Guidelines for the Implementation of the Three Streams of PHC Re-engineering in 2011 (17). The model is constituted of three streams. 1) Ward based PHC Outreach Team; 2) School Health Services; and (3) District Based Clinical Specialist Teams that were initially meant to focus on improving maternal and child (17). It also clearly shows how CHWs are incorporated into the model. The RPHC strategy recommended the Ward-based PHC outreach team strategy, among other changes, to improve health prevention and promotion, recognise individuals and families at high risk, and establish connections between households and health care facilities, among other items. Ward-based outreach teams (WBOTs) have come to be considered the backbone of South Africa's national CHW program and are notable in a series of policy interventions to shape the community-based sector (29). Overall, indicators such as antenatal, immunisation coverage and TB cure rates have shown that the performance of the PHC system has improved (13).

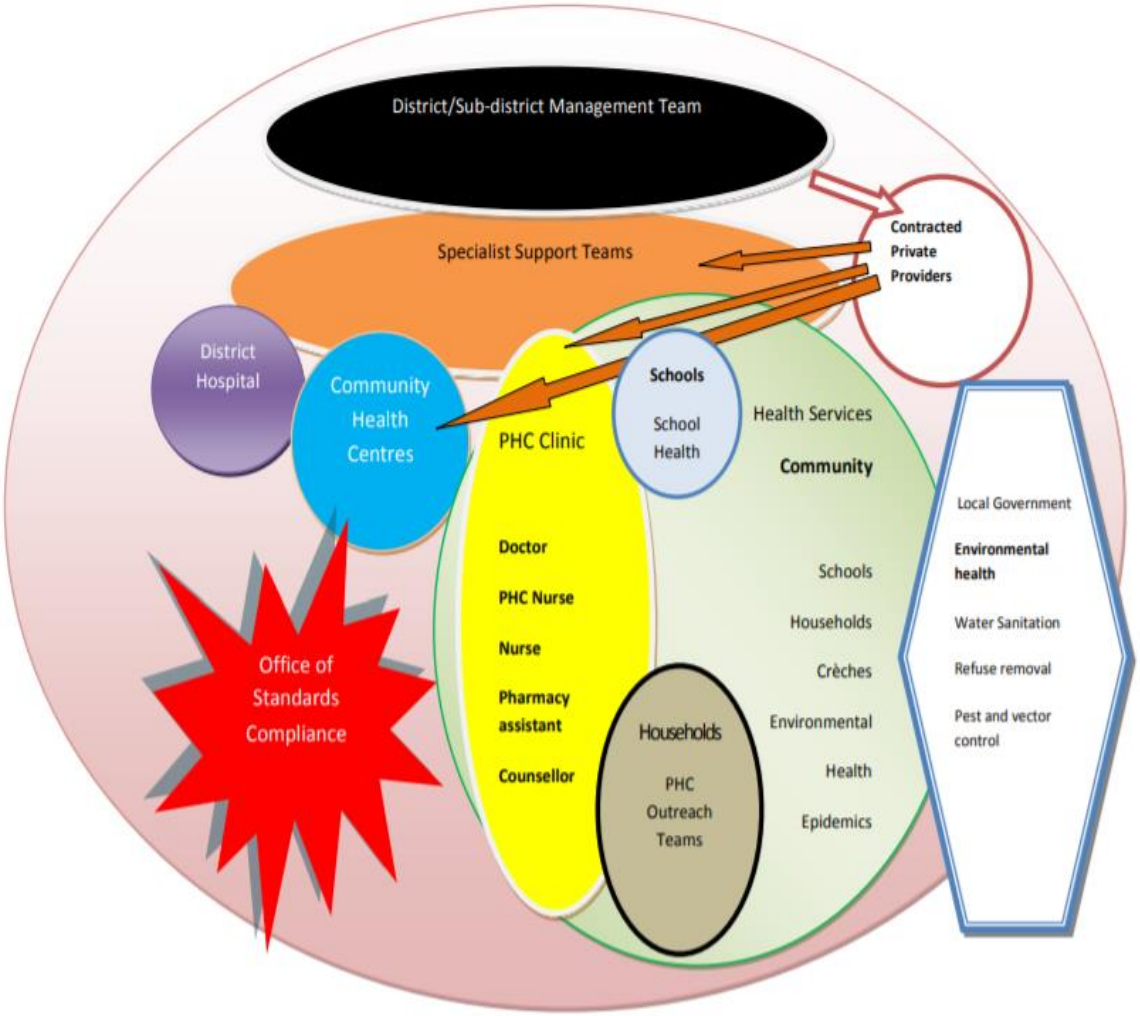

Figure 4.1 Proposed Primary Health Care Model

Source: (17)

Campbell and Scott (70) also indicate that community inclusion is critical for community health worker programmes' success. South Africa, therefore, gives the CHW a vital role in PHC re-engineering (71). By implementing the CHWs programme to re-organise and re-prioritise

primary health care and district health services in the country, CHWs have become central to its success towards UHC.

1.5.3.1 The Community Health Worker Programme in South Africa

In the late 1980s, CHWs thrived in the country due to international funding. However, from 1994 there was a noticeable decline in support from the National Department of Health and international donors, which led to CHWs programmes collapsing (35). The rise of HIV/AIDS impact in the 1990s saw a need for home-based care because the health system and health facilities were overwhelmed with the epidemic. During this period, CHWs emerged to provide cost-effective preventative care and supportive services to people in their homes (26). The growing burden of non-communicable diseases (NCDs) prompted the South African government to consider "task-shifting" in which community members such as CHWs were recruited and allocated to provide community health services at the PHC level (3, 18). Cargo et al. (72) stated that in South Africa, CHWs play a significant role in the health care system as they are front-liners who deliver health information and primary healthcare services. They act as community caretakers, counsellors and protectors, and information gatekeepers, informing their patients about a range of issues such as access to social grants (72).

A series of policy frameworks have been established within this context. The 2004 policy framework (73) accommodated the single-disease CHW, focusing on HIV and started to recognize the more generalist cadre (74). This was followed by the draft policy framework in 2015 which articulated WBOTs in which CHWs were considered as generalists under the supervision of facility-based nurses who support CHWs to provide health education, promote healthy behaviours, assess community health needs, manage minor health problems, and support linkages to health services and health facilities (18, 75). In addition, the implementation of PHC outreach teams became a key factor in understanding the roles of CHWs, including a focus on caring for conditions previously not included in their work (76). A WBOT includes a nurse who is an Outreach Team Leader (OTL) supervising six to ten CHWs. The team is linked to a facility and work within the municipal ward and offers promotive and preventive services to people at the household (Fig 2). Within this model, the training of CHWs consists of standard

training indicating their roles and functions of the whole team from district up to national level with implementation at provincial and district level based on national guidelines, policy and training documents developed through the WBOT strategy (29).

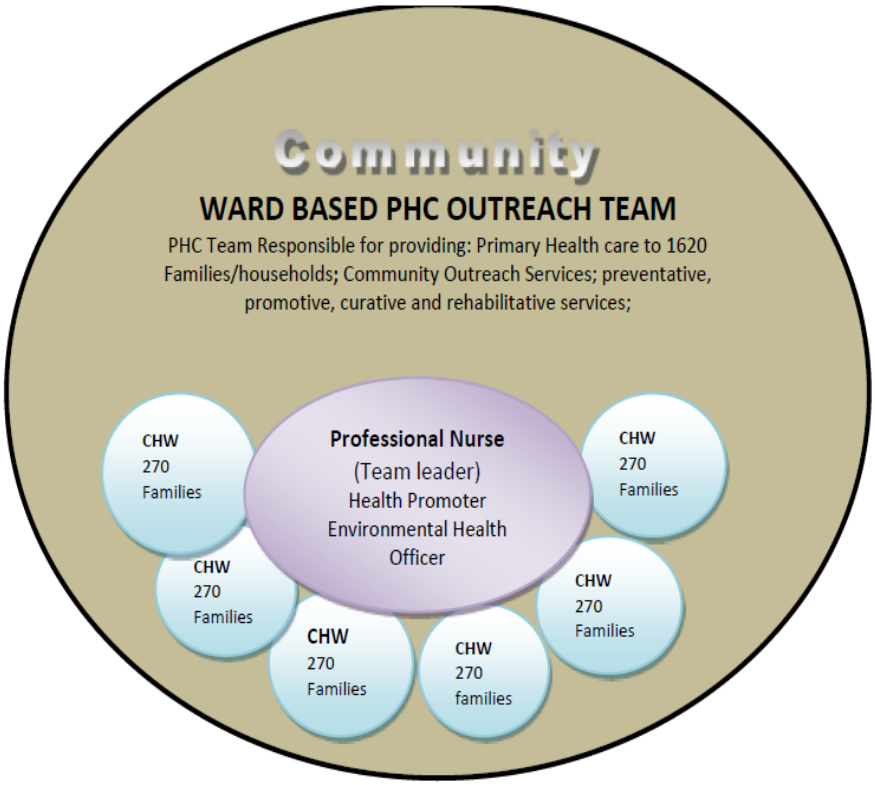

Figure 4.2 Ward Based Primary Health Care Outreach Teams

Source:(17)

The draft WBPHCOT policy framework and strategy (18) highlighted that under the Outreach Team Leader (OTL) CHWs' primary functions is to help the community prevent disease and illness and promote good health. In their duties, they must provide maternal and child health (MCH) services, address chronic non-communicable diseases (NCDs) and provide HIV and TB treatment support, screening and conduct referrals. At the same time, they are meant to monitor pregnant women and give pre- and post-natal care for children under five years. They also provide psychosocial and treatment adherence support services and perform administrative tasks as they are supposed to manage their filing for households and individuals assessed during their visits. They also have to prepare and meet monthly reporting requirements and be present for supervision meetings (18, 75).

In the same draft WBPHCOT policy framework of 2015, it is stated that CHWs will be employed directly by the DoH or come as secondments from NGOs to the DoH (18). In the same period as the launch of the White Paper on the NHI (23) which was proposed and envisioned to close the gap between the public and private health sectors and geared towards service delivery, CHW policy developments further led to the establishment of the Policy Framework and Strategy for Ward Based Primary Healthcare Outreach Teams. This current policy framework articulates a complete transition of CHW roles towards more comprehensive service delivery, with the use of enrolled nurses who have been oriented to community health nursing as team leaders for the WBPHCOTs (19). It should be noted that this expansion of roles also led to a varied shift from a single – disease cadre that was employed by NGOs which were funded via vertical programme (HIV/AIDS) budget lines to incorporation into the state (13). In light of this shift in increased roles for CHWs, it remains important to examine implementation of the established training and the extent to which it enables them to provide these comprehensive functions.

The current scope of work of CHWs include (19)

- Identifying health risks and assisting households to seek the relevant care
- Conducting home visits upon identifying pregnant women and ensure visits during pregnancy and post-natal period, to ensure healthy births by identifying potential danger signs.
- Supporting exclusive breastfeeding and healthy maternal-child behaviours
- Conducting individual level, household and community assessments
- Conducting screening and health-promotion campaigns in schools and early childhood centres in partnership with school health teams and relevant health care workers
- Proving support and counselling those that require guidance on family planning options
- Following up and assisting those with chronic conditions, distribution of medicines, ensuring individuals with adherence to their treatment and tracing any treatment defaulters
- Conducting inter-sectoral collaboration and working with other sectors, including participation in community-based programmes.

1.5.3.2 Community Health Worker training in South Africa

In South Africa, CHW training was framed under the NQF (ancillary health care and community health worker qualifications) and the non-accredited 59 days and 69-day training intended for home-based carers (17). Offering properly constituted training for CHWs was an important factor to standardise the national programme to avoid fragmentation within a health system with CHWs that cannot meaningfully improve the country's desired health outcomes. By 2006 the national DoH registered four CHW qualifications in terms of the NQF, making it possible to create CHW career development through accredited training. Since 2010 there has been a move towards a standardised training curriculum for CHWs in South Africa (16, 77). However, the training was not seen to adequately equip CHWs to fully undertake the roles and responsibilities required in the WBOTs (17). In 2011, it was proposed and concluded that the training of CHWs would be based on the National Qualifications Framework (NQF) in line with the new policy guidelines, which requires a minimum qualification requirement (NQF level 1 – 4[1] and one year experience) (17).

Despite these developments, several studies have indicated that it is reportedly fragmented, limited and inadequate (24, 26, 78). Provincial health departments have had limited capacity to ensure the mandatory training of CHWs has the required staffing, resources, and infrastructural facilities available. This has included ensuring that training is performed and monitored on a regular basis (79). In an audit of CHWs in one of the nine South African provinces, the North West, there were reportedly gaps in the training, such as inadequate length of training and standardisation due to huge bureaucracy of formal South Africa Qualifications Authority (SAQA) accreditation by the Health and Welfare Sector Education and Training Authority (HWSETA) of CHWs, which hindered them from providing quality and effective community-based health services (77). It was further noted that only 17% CHWs who participated in the audit were trained. The training was in the form of short courses such as TB-DOTS rather than formal courses such as CHW and Ancillary Health Care (77). Further findings showed that about 80% of the CHWs in the province had not received any formal and intensive training across any National Qualification Framework (NQF) Levels 1 to 4 (77). This

[1] National Qualifications Framework with General Education and Training Certificate (GETC) (Level 1) and Further Education and Training Certificate (FETC) (Level 2 to 4).

raises the need to examine what the current training entails and whether it achieves the intended purpose. As it stands, the training of CHWs remains a contentious issue in light of the raised concerns (77).

Because of the absence of a clear policy or legislation at the beginning of the millennium, stakeholders and Non-Governmental Organisations (NGOs) were at liberty to perform and train CHWs according to their standards and criteria (80). Parallel to the early stages of implementing the WBPHCOT strategy, a three-phase training programme was developed - with each phase structured over ten days with subsequent practicum (13). Phase 1 was initiated in 2012, Phase 2, initiated in 2014 and Phase 3, an accreditation phase constituting a one-year NQF L3 Health Promoter qualification and initiated in 2015 (13, 18, 19). Some efforts at appraising the implementation of the effectiveness of the WBOTs indicated that one of the achievements in the implementation of the current training was the fact that several provinces had established training systems that were decentralised at district levels using internal training centres. This was deemed a facilitator for implementing the whole WBPHCOT programme (13, 81). Despite these gains, several bottlenecks have been identified mostly related to poor coordination and planning, including lack of budgeting and inadequate resources (22). The policy further states that the Department of Health will review this curriculum with relevant stakeholders with refresher training opportunities (18, 19) however, there is no evidence to show that this has happened.

In light of the different developments in the evolution of policy guidelines of CHW training in South Africa, this research explored the extent to which the current training was equipping CHWs with the necessary skills to provide comprehensive PHC services in their communities. Moreover, it sought to explore whether the training they received prepared CHWs to face the issues they are confronted with daily where they work. It is important to note that this study

focussed on the first two phases of the implementation, and the training has progressed since the time of the research.

1.6 Chapter summary

The chapter provided a global overview of the HRH shortage and the role CHWs play in addressing this challenge. It further reviewed the ranges in their scope of work and their responsibilities, and the benefits thereof. It highlights how CHWs are recognised globally as an important cadre of health workers who require adequate formalised training to execute their roles and responsibilities. This chapter concluded by discussing the range of training available and the challenges experienced. Box 1 below outlines the key messages from the literature review.

Box 1: Summary of key messages

- CHWs are central to achieving UHC as they are central to PHC
- CHWs provide PHC services which have contributed to improvements in health outcomes in LMICs
- Training is central to ensuring effective CHW-led interventions, coupled with adequate mentoring, supportive supervision, resources, and job motivation
- There have been challenges in training programmes in LMICs which have compromised the effectiveness of CHW interventions
- There is a need for standardised training of CHWs in LMICs, and a range of models have been developed over the years, however, due to poor evaluation of the models, there is uncertainty regarding their effectiveness
- South Africa has established a standardised training curriculum for CHWs and examined how its implementation can potentially contribute to improvements.

CHAPTER 2: METHODOLOGY

2.1 Introduction

This chapter discusses the specific research methods used to address the aims and objectives of the study. It firstly discusses the study design employed and then provides a description of the study site and study population. After that, the chapter reflects on the sampling methods used to select the participants, followed by a discussion of the data collection, data management and data analysis. Lastly, the chapter is concluded by addressing the ethical considerations.

2.2 Study design

This study was used an exploratory qualitative study design. The design enables one to explore social phenomena with the aid of all the participants' views and experiences (82). It is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The research process involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. Those who engage in this form of inquiry support a way of looking at research that honours an inductive style, focusing on the individual meaning and the importance of rendering the complexity of a situation (83). It further allows researchers to understand the world in its natural setting, which cannot be interpreted by putting people in an unnatural situation as it describes a phenomenon in its setting (83, 84).

Qualitative research is used to gain knowledge of underlying reasons, opinions, and motivations. It is also used to uncover developments in an idea and view and dig deeper into the problem (83, 85). Therefore, this study design was appropriate for this study, where the researcher sought to examine and gain an in-depth understanding of the implementation of the training of Community Health Workers and the experiences and perspectives thereof.

2.3 Study site

The study was conducted in the Tshwane Health District in the City of Tshwane district (also known as the Tshwane Metropolitan Municipality) in the Gauteng Province, making up 30% of the Province (86). The City of Tshwane is the single-largest metropolitan in South Africa with a population estimated at 2,921,500 (87). The district was purposively selected based on geographical proximity, budgetary constraints and logistical considerations since the researcher resides in the area. Moreover, in 2010, the Gauteng DoH established a collaborative process with two universities located in the municipality, the University of Pretoria and the Medical University of Southern Africa (now known as the Sefako Makgatho Health Sciences University (SMU) together with a non-profit organisation; the Foundation for Professional Development (FPD) to initiate and implement a municipal ward-based which was based on the premise of Community Oriented Primary Care (COPC) (88). This approach used a concept of health posts that were structures located within communities and comprised of teams made up of nurses and CHWs. By 2011, seven health posts were established and active (88). Therefore, the district was deemed an ideal site as it already had WBOTs that had established and had a history of the ward-based PHC approach.

The study was conducted in two Tshwane sub-districts, namely Region 1 and Region 3. These sub-districts were purposively selected as they comprised active WBOT teams and due to geographical proximity and convenience for the researcher as they were close together and therefore required minimal travelling between the two. Region 1 is situated in the western part of the metropolitan area with an estimated population of 811 570 people in 2011 (87) constituting approximately 28% of the total population of the City of Tshwane. The region areas include Mabopane and Winterveld and the townships of Soshanguve and Garankuwa, which were designed as labour reserves for Rosslyn and the City, manufacturing hub and the population occupying low-income levels. The region has six health posts, three mobile clinics, 18 day-clinics and three community health centres (86). Region 3 includes the CBD of Tshwane, the Brooklyn and Hatfield metropolitan nodes and the western area of Tshwane (86). It has a population of 514195 (87) - approximately 18% of the total population of the City of Tshwane, and an estimated 39 % of the population can be regarded to occupy the low-income group (87). Region 3 has 9 health posts, 1 mobile clinic, 13 day-clinics and one community

health centre (87). Two PHC facilities were purposively selected, one in each region. These were selected because they were both surrounded by informal settlements and the CHW teams were active and providing services in those areas. Another reason for their selection was that the teams constituted cadres as recommended in the policy (i.e. nurse that is a team leader supervising 6-10 CHWs) while also having WBOT coordinators. The researcher also selected two facilities as the number of CHWs in one facility would have provided a small sample, hence the second facility assisted to augment the sample and having two 2 focus groups. In addition, Facility A in Region 1 has a professional nurse (PN) as an OTL, while Facility B in Region 3 had an enrolled nurse (EN) as an OTL. Anecdotal evidence indicates that CHWs that a PN lead tends to function better than those led by an EN due to the difference in experience, where the PN has developed some leadership skills and can negotiate aspects related to their supervision, training and overall management more effectively than the EN. The researcher aimed to observe the extent to which these differences potentially influenced the experience of training and the roles assumed by the CHWs in each respective facility. Considering that the CHWs and the managers had some experience of the WBOT programme and the training, the study sites were ideal for providing insights on the challenges and opportunities that have been realised regarding the training of CHWs.

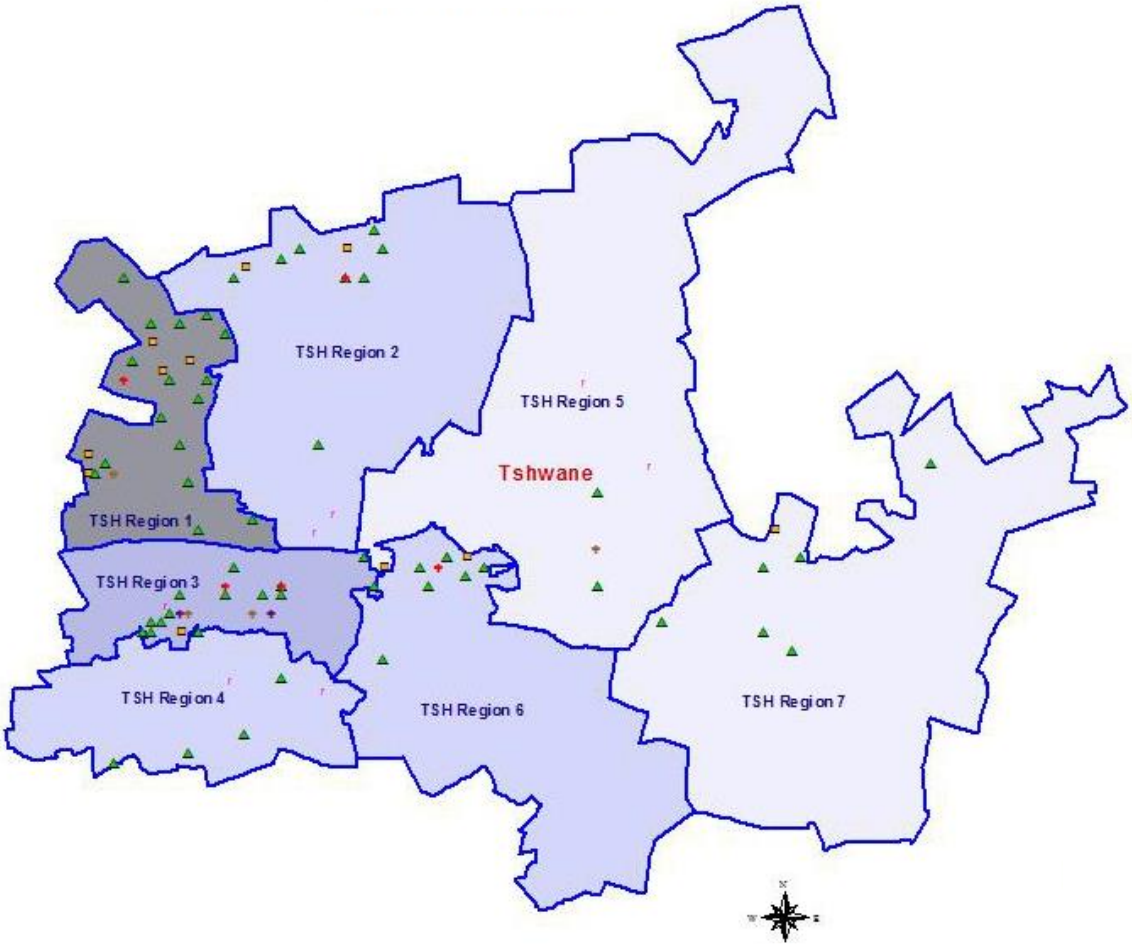

Figure 4.3 Map of the City of Tshwane District

Source: (89)

2.4 Study population

This study included all Community Health Workers (CHWs), WBOT Coordinators, Outreach Team Leaders (OTLs) and Facility Managers. The study also included a District Manager, a Provincial (GP) DoH representative, trainers from the local NGOs and the District DOH. These managers and senior managers were included to provide policy insight and policy direction about the WBOT programme and the training. In addition, they were able to provide overall experiences of the training in the district and the overall context.

2.5 Study sample

In this study, participants were selected through purposive sampling. Purposive sampling refers to a technique where the researcher chooses participants who are rich with information such that they can provide in-depth information about an issue that is central to an inquiry (90). The inclusion criteria for CHWs were those who had been part of the WBOTs for at least 1 year and had attended Phase 1 and Phase 2 of the training. This would ensure that they could provide rich insights on their experiences of being part of the WBOTs and the training. 16 CHWs were selected, 8 per facility, 2 OTLs, 2 WBOT coordinators and 2 facility managers from each region were selected based on that they were closely involved in the supervision and management of the CHWs and the management of the WBOTs. The 1 district manager and 1 provincial representative were selected by their capacity of being involved in policy decisions, while 2 NGO representatives/trainers and 2 District DoH trainers were selected based on that they were directly involved in the training. This resulted in a total of 28 purposively selected participants (Table 2.1).

Table 4.1 Study sample

Study Participants	**Number**
Community Health Workers (CHW)	16
WBOT Coordinators	2
Outreach Team Leaders (OTLs)	2
Facility Managers	2
NGO Representatives/Trainers	2
DoH District Manager	1
DoH District Trainers	2
Provincial DoH Representative	1
Total	**28**

2.6 Data collection

In order to understand CHWs' and relevant stakeholders' experiences and perceptions of the implementation of the training, the researcher conducted focus group discussions (FGDs) with CHWs, and key informant interviews (KIIs) with those working in managerial positions (OTLs, facility managers, WBOT coordinators, the district manager, NGO representatives and the GP-DOH representative). Although not part of the objectives, the researcher reviewed the training manuals for Phase 1 and Phase 2 (91, 92) as the researcher managed to access them only after data collection had started. They were provided during the interviews by Department of Health representatives. Reviewing the manuals enabled the researcher to supplement some of the views expressed regarding the content of the training. The duration of the data collection was May 2017 to January 2018. This was because the process had to be extended because the researcher identified participants who were recommended to have more in-depth knowledge and experience of the training curriculum, therefore there was a second phase of data collection.

2.6.1 Focus group discussions

After the initial meeting with the facility managers in each clinic, the researcher met with the CHWs' respective OTLs, explaining the purpose of the study and the reason to interview the CHWs. After the OTL's explained the study to the CHWs, the researcher held meetings with the groups in the respective clinics to explain the study and seek voluntary participation. To get more in-depth insight into the views and experiences of CHWs regarding the training, the researcher conducted two focus group discussions (FGDs) in the two regions using a semi-structured interview guide (Appendix 2). FDGs are used by researchers who seek to obtain information through a participatory discussion among participants in one place over a particular period (93). This method emphasizes the value of the interaction between participants and researchers because it allows participants to exchange experiences, ideas and thoughts (93). The questions covered themes mainly related to exploring the roles and responsibilities of the CHWs, the extent to which they understood those roles and their perceptions regarding their experiences of the WBOT training. This included the extent to which they perceived their training to equip them to provide these mandated roles. This methodology was particularly ideal as it allowed the researcher to stimulate conversations that generated a diverse range of views as enabled by the dynamics of the group interactions. The FGDs were conducted in

English; however, Sotho and Tswana are the two predominant languages in the two regions, and hence they had a choice to communicate in either of the languages. In instances where participants did not understand certain words, the direct translation of the words was done in either of those languages as the researcher is proficient in both. FDGs took an average of one hour and thirty minutes but did not exceed two hours. The FGDs were audio-recorded, while additional reflective notes on the dynamics of the discussions, non-verbal cues and comments were recorded to supplement the FDGs. In Facility A (Region 1), the FGDs with CHWs were conducted at the local area where they met every morning before they conducted their household visits and in Facility B (Region 3) they were conducted at a place where they also assemble before they go out in the community. The discussions were held in privacy to maintain confidentiality and any disturbance, as they were audio recorded. The CHWs were also informed that as much as the researcher would aim to ensure confidentiality, she could not guarantee that other group members will ensure that all the information discussed is kept confidential as this is out of her control. However, before the discussion, she requested that this be honoured. Consent was obtained to audio record the FGDs (Appendix 3) and conduct the FGDs (Appendix 4). The CHWs were each provided with an information sheet to inform them of the purpose of the study (Appendix 5).

2.6.2 Key informant interviews

In each sub-district, face to face KIIs were held with the managers using semi-structured interview guides (Appendices 6-10). Key informants are considered to have in-depth knowledge of their respective field or the inquired phenomenon (94). Key informant interviews enable the researcher to obtain a detailed, rich and deeper insight into a phenomenon related to the inquired topic due to the key informant's skills and position in society (94, 95). The key informants were contacted telephonically, during which the researcher explained the study and secured dates for the interviews. The structured interview guides were specific to each manager category. Although specific to each manager, they all covered themes mainly related to their views and understanding of the roles and responsibilities of the CHWs, their perceptions of the training and the extent to which they considered the training to have equipped the CHWs with the skills they needed to provide their mandated functions. The interviews were held from the participants' respective workplaces in a quiet space of their choice. They were conducted during

their working hours at times and days they had recommended. Privacy and confidentiality were maintained during the discussions. The interviews were conducted after obtaining consent to be interviewed (Appendix 11) and to be audio recorded (Appendix 3) and they were provided with respective information sheets to inform them of the study (Appendices 12-15). The KIIs were conducted in English with no direct translation as respondents were well conversant with the language, and they were 60-90 minutes in duration.

In both the FGDs and the key informant interviews, field notes were written, which assisted the researcher in recording details that describe the context and the non-verbal communication that may supplement, corroborate with and add to the richness of the data.

2.7 Data management and Data analysis

2.7.1 Data management

After each interview, a unique code was assigned to each audio recording of the Key Informants interview and FGDs. The codes were only identifiable by the researcher. All signed consent forms and field notes (kept to ensure accuracy and for backup purposes) were kept in a secure cupboard under lock and key. The transcripts were stored on a computer, password-protected, and only the researcher and her supervisor had access to them. An independent consultant who understands English while simultaneously speaks and understands the two vernacular languages transcribed the data from both the interviews and the FGDs to English. For quality assurance and accuracy of the transcriptions, the researcher read and listened to the audio recordings while simultaneously reading each transcript and attended to any errors where necessary.

2.7.2 Data analysis

The audio recordings were transcribed verbatim onto Microsoft Word by the researcher. The transcripts were cleaned to identify any inaccuracies and errors. After transcribing, thematic content analysis (96) was used to analyse the data from the FGDs and interviews and the

triangulation of the data from both sources ensured the credibility of the data. It also allowed me to identify any contradictions and differences in perspectives, including similarities (97). The transcripts were read line by line to identify the pre-determined themes and emerging themes, identifying the dominant themes and sub-themes. The researcher returned to the data to confirm and verify any emergent and divergent themes. After identifying the themes codes were created and grouped into common themes. These themes were reviewed with the original transcripts to ensure analysis credibility (98). The credibility of the data was also ensured by validating the codes with the supervisor through a series of meetings and multiple drafts. The themes and sub-themes were further analysed against the themes from the KIIs and FGDs to identify gaps, similarities and differences between the perceptions of different stakeholders working in the CHW programmes and those of the CHWs.

2.7.3 Rigour in research

2.7.3.1 Trustworthiness

Trustworthiness is a form of measure to ensure rigour in qualitative research (99). In order to demonstrate the trustworthiness of the data, the researcher ensured the dependability of the data by allowing the supervisor to verify the codes and analysis and by meticulously describing the research methodology employed, including themes provided. The credibility of the data was ensured by triangulating the different sources of data from the FGDs and KIIs interviews while the field notes were taken into account to supplement the data.

2.7.3.2 Researcher reflexivity

As a researcher, one has assumptions and pre-conceived perspectives on the subject being researched during the research process, thus bringing subjective notions onto the data collection process (100). As the researcher, I made an effort to reflect and recognise that my values, biases, and beliefs could potentially influence my understanding and interpretation of the data. During instances when looking through the data, I made a concerted effort to constantly question and challenge my thoughts regarding the extent to which any biases emerged during

the interpretation of the data. Verifying the analysis and interpretation of the data with my supervisor helped to mitigate any potential misinterpretation.

2.8 Ethical considerations

Ethical clearance was obtained from the University of the Witwatersrand Human Research Ethics Committee (Ethics certificate – M160856) (Appendix 16) and the ethics committees of the Gauteng Provincial Department of Health (Appendix 17) and the Tshwane District (Appendices 18-20). Information sheets (Appendices 5, 12-15) were provided to all the participants, which described the study's objectives, the procedures the benefits and disadvantages of participating in the study. After being furnished with the information on the study's aims, the researcher sought consent to interview them through the FGDs (Appendix 4) and the KIIs (Appendix 11). Informed consent was received from the study participants through a signed consent form for audio recording (Appendix 3).

To ensure confidentiality, all data were de-identified by assigning pseudonyms such as "OTL 1" to the participants as opposed to using their names; this included the health facilities for which terms such as "Facility A" were used. All data were kept in a secure location, where the electronic version was kept in a computer under a password, while hard copies such as signed consent forms were locked in a secure place. All audio recordings will be destroyed after two years after the publication of the study and six years if the study is not published.

CHAPTER 3: RESULTS

3.1 Introduction

This chapter presents the findings of this study. The chapter provides a detailed account of the experiences and perceptions of the CHWs and those in management regarding the implementation of the CHW training programme in the Tshwane district. It begins with a description of the study participants, and then the findings are presented in the following eight themes: the roles and responsibilities of CHWs, the content of the curriculum and perceptions on content, experiences and perceptions of training, constraining factors to training implementation, and factors to improved training.

Figure 3.1 below summarises the themes and sub-themes discussed in the chapter.



Figure 4.1 Summary of Themes

3.2 Characteristics of participants

Twenty-eight participants participated in the study. This included 16 CHWs, eight from each of the two study facilities, two outreach team leaders (OTLs), two ward based outreach team (WBOT) coordinators, two facility managers, one district manager, two trainers from the District Department of Health, one representative from the Provincial (Gauteng Province) Department of Health (DoH). This was together with two other representatives (trainers) who were from the NGO sector.

All the CHWs that participated in the study were female and had at least three years prior experience as CHWs, with a Matric[2] as their highest qualification. The median age for CHWs was 32 years. The two OTLs, one from each region, were female, and both were aged between 35-40. Both had undergraduate nursing qualifications and postgraduate training (Diploma in Primary Health Care Nursing and Diploma in Nursing and Midwifery). One OTL was a Professional Nurse (Senior Nurse) with more than seven years of experience, while the other OTL was an Enrolled Nurse (Junior Nurse) with less than five years of experience. The two OTLs received training on the WBOT programme provided by the DoH to equip them with skills related to the programme for them to fulfil their roles as the team leader of the CHWs. OTLs are mandated to supervise and manage the work of the CHWs and ensure that services are provided to the communities and households within the designated catchment areas.

The two WBOT Coordinators were professional nurses with more than five years of experience. They both assumed the teams' overall coordination of the supervision of CHWs and ensured that the operational activities of the OTLs take place. The District Manager oversaw the overall implementation of the WBOT programme in the district in line with the provincial and national plans for implementing the programme.

The two Facility Managers were professional nurses: one female and one male. They both had more than ten years of experience and were of a median age of 50 years. The two

[2] Matriculation (or matric) refers to the final year of high school and the qualification.

representatives (trainers) from the NGOs were both female, one a medical doctor and the other primarily a WBOT trainer.

Both provincial and district representatives had more than seven years of experience. The three district representatives (one district manager and two district trainers) were professional nurses who joined the WBOT in 2012 and were trained as trainers in the programme.

3.3 Roles and responsibilities of CHWs

It was evident from the findings that CHWs had multiple roles. These included conducting household registration and screening, providing health education and information, referrals from households to various places where people need services such as clinics. They also provided social services, home-based care, ensured that households were referred to social services to address aspects that had an indirect impact on health and wellbeing, distribute contraceptives and medicines, and are responsible for the reporting of data collected from households.

3.3.1 Household registration and screening

The participants mentioned that CHWs are allocated to a range of individuals (clients) and households that they regularly visit. Within the area they provide services, CHWs ensured that every household is registered using a household registration form. This form captures general household members' information (age, gender, information about the household such as whether there is electricity, whether piped water is in the house or the yard, a working fridge in the house, a toilet in the house, the number of rooms, number of grants received in the household, and the number of people working and names of schools for learners). It also included general household screening questions on Tuberculosis (TB), HIV, non-communicable diseases, family planning, the need for social grants, any presence of bedridden household members, and issues related to maternal and child health (MCH). Over and above

conducting registrations, they also conducted the screening of household members for possible illnesses. One respondent explained as follows:

"The main focus of the community health workers is that they must register everyone in the households. Each community health worker is assigned about 270 households to register. However, they have certain areas where they must screen for illness in every household to identify illnesses and challenges and to refer them to the health facility." (WBOT Coordinator 1 – Facility B)

CHWs used household registration forms to collect information and feed it into a database for the government's health information system. The household registration forms, therefore, constitutes part of the monitoring system. One of the participants from the NGO sector, responsible for the training and therefore are required to keep abreast of the activities of the WBOT programme in the sub-districts, indicated as follows:

"We moved from a paper base, and we are using gadgets, electronic gadgets. So, I can withdraw (sic) reports, maybe monthly or quarterly to view performance per sub-district." (NGO representative/trainer 1)

It was also evident that visiting the households where they interact with household members enabled CHWs to identify existing health issues and the social challenges in each household. One of the CHWs stated that:

"I get to know more about what is going on within the households. When I visit a household, I check with the owner, the mother or the father, before checking on children if they have any diseases. We discuss everything with them, every problem that the patient might have, and we help them out." (CHW 4 – Facility B)

Therefore, the above account illustrates that CHWs adopt a holistic perspective regarding the health situation when they enter a household.

3.3.2 Health information dissemination

CHWs' responsibilities included conducting health education for disease prevention and health promotion. They reportedly provided educational health information to communities through home visits, support groups, and community campaigns. As one participant indicated:

"Their most important job is to conduct health education sessions as a way of preventing illnesses and promoting health in the community." (WBOT Coordinator 1 – Facility B)

The activities involved in information dissemination complemented and enhanced their role in mother and child health (MCH) services. Participants noted that the CHWs highlighted the importance of HIV treatment for both mother and child. A CHW explained:

"You find again that a person is pregnant, but they do not understand how to breastfeed a baby. As a new mother, they are not knowledgeable about how to handle a newborn baby. Therefore, we educate them on how to care for a new baby. Sometimes you find a pregnant woman not visiting the clinic for them to be cared for. We teach these women the importance of attending prenatal care visits. Sometimes, the person is on Human Immunodeficiency Virus (HIV) treatment, so we teach them that they should go to the clinic so that they can protect the baby." (CHW 2 – Facility B)

Another CHW further explained:

"In the household, we find a woman suspecting that she is pregnant. We educate them and tell them that they could be pregnant if they have not seen menstruations for 6 weeks. Then we refer to the clinic, and then if she wants to know why we are referring her, we teach them that when pregnant, one must go to the clinic and check for pregnancy. Because you find that some people do not know, they sit at home until they are four months pregnant. The important thing is that they go to the clinic so that when they check them for pregnancy, they also check them for HIV" (CHW 1 – Facility B)

Furthermore, one team leader mentioned that when CHWs identify pregnant women, they refer them to health facilities where they are registered before being assisted for delivery.

"We also check on pregnant women and follow them until they give birth to their babies as well as ensuring that they attend all the required clinic visits at each stage of their pregnancy and afterwards." (OTL 2 – Facility A)

Another CHW mentioned that they also distribute condoms and provide information on HIV prevention.

"We also distribute condoms in households. We promote safe sex for everybody. We don't discriminate based on age, because you understand that everybody is having sex sometimes. We promote condom use." (CHW 13 – Facility A)

3.3.3 Roles in curative care

Some of the participants noted how CHW's roles also included curative care. This consisted of activities such as the administration of medicines and vitamins. A CHW noted as follows:

"We also check children and their Road to Health Cards[3] to ensure that they are taking their vitamins properly. If they are not, we administer them. We register them, and we give children the prescribed under - 5 years - vitamins and de-worming mixture." (CHW 5 – Facility B)

This illustrates that the CHWs' roles also included some basic aspects of patient treatment when they came across community members who needed that support. However, it was noted that this did not include the diagnosis and prescription of drugs, therefore implying that this role was limited.

[3] The 'Road to Health' card (RTHC) is a free book for all babies in SA that is used to keep track of a baby's growth and development milestones in the first 5 years of life.

3.3.4 Roles in chronic care

CHWs also contributed to providing chronic care. This included testing for diabetes, monitoring patients that have diabetes and testing their blood sugar levels. They also reportedly assisted patients on TB treatment to ensure adherence through Directly Observed Treatment (DOTS) and medication delivery to those on treatment. This formed an integral part of their responsibilities. One of CHWs explained this as follows:

"We also test their blood sugar. We also do a sputum collection. We also do TB tracing. We also provide DOT support if a person is on TB treatment and is not taking their medication properly. We also deliver medication to our elderly patients in households in the field." (CHW 3 – Facility B)

Another CHW further commented on their role in providing care to chronic patients:

"….Like, if we find out, from the household (registration) form we spoke about, which has some questions on TB, that a person has some of the symptoms listed there, we take a cooler box with ice packs, and we go to their home, collect their sputum and bring it back to the clinic." (CHW 14 – Facility A)

Another participant mentioned that CHWs also check Blood Pressure (BP) and other chronic illness of patients in the communities.

"They measure their BP, their blood sugar levels, we also check asthma patients as well as epilepsy." (WBOT Coordinator 2 – Facility A)

3.3.5 Roles beyond health

The roles of CHWs were not limited to health-related issues. They also conducted referrals of community members who had problems that required social services, for instance, social workers, and/or the police, depending on each case's needs. Some cases, such as those

involving people living with a disability were referred to social welfare. One of the team leaders noted this:

"If you get into the household and you find that there is a disabled child, you have to refer the child to social welfare. You have to find a social worker to arrange for the social grant[4] *so that the family is helped. Some of the families tend to hide disabled children from other children and the community. We advise them to take them out of the household so that they can develop well."* (OTL 1 – Facility B)

Another CHW also supported the notion of them catering to issues that have an indirect effect on the wellbeing and health of communities:

"Our job does not mean that we only refer to healthcare facilities; we also refer people to social workers. If we see that there are difficulties in the community, those that require social workers, we refer them to social workers. There are those children who do not get their grants; you find that they are orphans, mostly those are the cases that we encounter in the community." (CHW 3 – Facility B)

Others gave examples of how they engage with the other sectors that deal with issues related to various social circumstances:

"Like in cases where a person has lost their card that they receive their child support grant through, we refer them to the police station to do an affidavit, and to the hospital, where they had the baby at so that they can get a replacement card, and the child can go back to school." (CHW 15 – Facility A)

[4] A Social Grant refers to the social assistance provided by the South African Social Security Agency in the form of different grants for children (for example Foster Child Grant, Care Dependency Grant, Child Support grant and Grant-in-aid).

The participants also added how where there are sewerage problems, they inform local authorities, therefore again illustrating how CHWs are involved in inter-sectoral action to help communities address issues that affect their health and well-being:

"Sometimes we come across areas where there is a burst sewerage pipe. We tell the Ward Counsellor, and he can inform his people for them to come and fix the pipe." (CHW 9 – Facility A)

These inputs from the participants highlight that CHWs' roles and responsibilities are comprehensive and transcend health-related issues.

3.3.6 Role in home-based care

Coinciding with the notion of providing care beyond that of health, it was apparent that the CHWs had incorporated their historical and/or traditional skills in home-based care (HBC) into their general roles. It was noted that they helped patients carry out household chores and maintain general cleanliness and hygiene. This was particularly true for vulnerable populations such as the elderly, the disabled, and children. Improving the hygienic standards within the households was reportedly a key aspect of their responsibilities. One of the OTL's explained as follows:

"We also clean. If we find that maybe an older woman lives alone or lives with younger grandchildren, we clean the house for her. Sometimes she might be living with older grandchildren who are only interested in bathing and going out without cleaning the house and bathing the granny. We clean for that granny for the first time. We then tell the older grandchildren that next time, we expect them to clean as we did. We show them how it's done, and then tell them we expect them to continue." (OTL 2 – Facility A)

The OTL further explained:

"They (CHWs) have called me and informed me that someone was sick. They told me that when they got there, the place was untidy, so they took aprons, gloves, and everything and went there. So, I asked them as CHW's what they were going to do. They said this person is bedridden, and it's just a mess; we will clean, bathe her, check her medication, and see if it hasn't expired. If there is food, they cook for her. We even check the yard, because it's not healthy to have medication in a dirty environment." (OTL 2 - Facility A)

3.3.7 Role in providing data for decision-making

Finally, CHWs reportedly collected statistical information, which they reported to their central offices. This is also related to the surveillance tasks they performed. The information reported included the activities they have carried out in communities, the number of patients they have helped, and the health hazards observed. This indicates that CHWs play an important role in providing and supplementing information used for monitoring purposes. One of the facility managers accounted as follows:

"The evidence of the work they have done will be statistics that will be submitted to my office. For example, these are the kind of statistics or reports they send to me that will indicate what's done in terms of everything mentioned there including some of the PHC indicators, how many children did we give vitamin A, how many did we deworm. Part of their work is to report to the clinic's monthly statistics like when we check the indicator for nutrition. Part of the reason we perform well in the facility is because of the contribution of CHWs." (Facility Manager 2 - Facility A)

Overall, CHWs conduct a wide range of roles and responsibilities from preventative to health promotion. They also provide home-based and chronic care, including profiling and registration of households. They further fulfil some roles beyond their scope of work, such as conducting housekeeping chores and bathing the elderly, curative roles, and inter-sectoral collaboration. They also played a key role in the provision of data for decision-making in the CHW programme.

3.4 Content of curriculum and perceptions on the content

The findings presented in this theme pertain to the first two phases (Phase 1 and 2) of the training of CHWs that had taken place by the time data collection commenced. The participants provided descriptions and views regarding the training content, while the additional details were drawn from the training manuals (91, 92) provided by the senior managers.

3.4.1 Phase 1 Training Content

Phase 1 (Table 3.1) of the training curriculum covered basic areas such as community entry, how to conduct a household assessment and home visits, referral of community members to services in the community, and maternal health and HIV and TB. It included topics on HIV prevention and treatment, the provision of health education, the screening of community members for health problems. The table below provides a detailed list of the training knowledge contents.

Table 4.1 CHW Training Manual Phase 1

PHASE 1 CONTENT
Orientation of the CHW to the South African Healthcare System
Basics of Health and the CHW
Healthy Lifestyle and the CHW
Environmental Health and Hygiene and the CHW
Basics of First Aid and the CHW
Learning About Me and the CHW
Building My Skills and the CHW
Community Assessment and the CHW
Basics of HIV and the CHW
HIV Treatment and the CHW
Basics of TB and the CHW
TB Treatment and the CHW

Sexually Transmitted Infections and the CHW
Integrated Treatment Adherence and the CHW
The health of the Woman and the CHW
Pregnancy and Antenatal Care and the CHW
Postnatal and Infant Care and the CHW
Prevention of Mother-To-Child Transmission of HIV and the CHW
Basics of Child Health and the CHW
Child Nutrition and the CHW

Source: (91)

Participants described and provided an overview of the content covered in Phase 1. They noted that it introduced CHWs to the concept of the health system and community-oriented primary care (COPC). One coordinator reiterated the content covered as follows:

"Phase 1 training is focused on HIV, TB, STIs, mother, and child. The training focuses on the four disease burdens." (WBOT Coordinator 1 - Facility B)

While new concepts were introduced in Phase 1 training, the focus was to ensure CHWs' understanding of HIV treatment, encourage community members to make sure that they know their HIV status and refer community members to the clinic for an HIV test. With regards to TB, CHWs were trained to understand the different aspects of TB so that you can talk to household members and the community; screen all household members for TB; and ensure that HIV-positive people and all children under five who have been in contact with people with TB are given preventative medicine (91).

3.4.2 Phase 2 Training Content

Phase 2 (Table 3.2) training was, on the other hand, consolidation of Phase 1 and focused on the promotion of health and prevention of illnesses, HIV, TB, malaria, chronic diseases, domestic violence and injury, women's health, youth services, caring for the elderly, and palliative care (92). The content continued to discuss the importance of household members

knowing their HIV status and referring them to the clinic for an HIV test, screening and referring household members for TB, and the provision of more information to household members on what Opportunistic Infections (OIs) are, including the common types of OIs (92).

Table 4.2 CHW Training Manual

PHASE 2 CONTENT
Promoting Health and Preventing Illness and the CHW
Preventing Illness and the CHW
Community Mobilisation and the CHW
Working with Communities and the CHW
Diabetes and the CHW
High Blood Pressure and the CHW
Stroke and the CHW
Heart Problems and the CHW
HIV and TB and the CHW
Malaria and the CHW
Health of the Woman and the CHW
Health of the Man and the CHW
Old Persons and the CHW
Women and Aging and the CHW
Youth-friendly Services and the CHW
Domestic Violence and Injury and the CHW
Child Abuse and the CHW
Social Grants and the CHW
Social Services for Children and the CHW
Palliative Care and the CHW
Caring for the Mouth and Teeth and the CHW

Source: (92)

Participants described how Phase 2 training also focused on helping CHWs understand issues and factors that affect household members' health and contribute to staying healthy. The content focused more on lifestyle-related issues such as non-communicable diseases, violence,

general cleanliness, environmental issues, including social issues such as caring for the elderly, community mobilisation, and community work. One coordinator stated that:

"Phase 2 focuses on Violence and Injuries and Non-communicable diseases that are mostly related to lifestyle injuries (sic) like diabetes and hypertension." (WBOT Coordinator 1 - Facility B)

Phase 2 training was considered as more advanced in that it was preparing CHWs for qualification and advancement in health promotion. One participant indicated that:

"Phase 2 module is a qualification; they say its health promotion. I forgot the qualification, but it enables one to be a health promoter or to even work in some of these NGOs that provide better salaries or giving them permanent employment." (Provincial Representative)

The CHWs also seemed to be satisfied with the content of both Phase 1 and Phase 2. For example, they acknowledged that the training content was relevant and applicable to their communities' health needs and context. Moreover, it included environmental health and the different factors that indirectly affect a community's health.

"I liked it a lot where they taught us to check the environment. You see, where we live a squatter camp, and with me, the side that I work in is in a dumping site. You find that we enter into some shacks and it is full of bottles all over the place. Kids are just eating from the dumping site. We were taught about hygiene. People struggle to understand us when we talk about their environment. Therefore, we teach them the importance of cleanliness and ensure that the children do not get sick. I even particularly check when the child did deworm and had vitamins. I like it because the training also taught us that things such as those, we must look out for them and get them done." (CHW 7 - Facility B)

What is evident from the views expressed is that the CHWs had to go through a large amount of training content for the two phases. It included the fundamental basics of their work, which

enhanced the CHWs' confidence and proficiency in applying what they had learned when they provided services in communities.

3.5 Experiences and perceptions of training

3.5.1 Elements of implementation

The experiences and perceptions of the CHWs and the managers regarding the training yielded several sub-themes. Some of the views on the training included those related to elements that shaped the training, such as the trainers' profile and the methods used during training, including language issues. These are expanded on below.

3.5.1.1 Profile of trainers

A few participants noted that trainers in the programme had diverse qualifications. The trainers were from within the public sector and, therefore, were familiar with the context of PHC. They also in their capacity attended a training programme for trainers to prepare them to manage CHWs. One participant who trained as a trainer was also qualified as a professional nurse, and she noted as follows:

"I am a nurse by profession and was also trained as a team leader. Firstly, I attended a 10-day training in 2011, and then I attended a 5-day training, the training that will teach me how to manage the CHW's and other administrative work". (District Trainer 2)

Moreover, it was evident that those involved as trainers had been engaged in the evolution of the WBPHCOT programme over the years:

"I am a professional nurse, and I have been involved with WBOT since 2011 I have done the training previously run by BroadReach[5] and also now that it is the new curriculum which is upscaling the CHWs". (District Trainer 1)

[5] BroadReach is an NGO that provided government especially the national Department of Health with technical expertise in training.

Continuing with the notion of the trainers' profile, one of the elements mentioned in the way the training was implemented was the invitation of facilitators who were experts in particular fields. Participants were of the view that it provided CHWs with practical frontline examples and improved the training. One of the trainers opined as follows:

"...we involved a coordinator of TB because they know of the latest information that should be given whatever is happening in the clinic now. We invited a coordinator of TB to facilitate TB; we invited a district clinical specialist, (to) teach CHWs about maternal and child issues. The first chapter was about the introduction of health, hygiene, the swot analysis for the CHW's and all these heavy subjects we would invite the experts to come and teach the CHW's, and it improved because they taught them the practice that is done in the clinic, they would come with the clinic card into the training, they would teach them how to admit a pregnant woman, how to go about that card…even the expert on primary healthcare was invited to teach them on child health issues." (District Trainer 2)

3.5.1.2 Multiple teaching methods

A few participants mentioned that the teaching modalities used in the training programme were designed to simplify the training content so that they catered to those CHWs who were likely to struggle with the written content. Classroom discussions, therefore, incorporated visuals in the presentations to enhance the understanding of the content. Two participants elaborated this as follows:

"They have the notes and the flipcharts, like that one of STIs we do have the flipcharts of TB, and STIs and HIV. Therefore, if you have a presentation, then see the pictures; that if you say yellowish discharge, you will see that this one is yellowish discharge, and you won't forget that." (OTL 1- Facility B)

"Flow charts were used so that they could refer to them. For example, HIV testing, so if one couldn't understand whatever was written, they could follow the diagrams and be able to explain what they are being taught." (Provincial Representative)

Participants commented on the strengths and benefits of the training approaches. For instance, Phase 1 was reportedly conducted through a workshop approach for ten days which was reportedly largely participatory, with CHWs taking part in role-plays. One Facility manager mentioned that:

"There were activities that we had, and these were also aligned to the modules. Therefore, training is in the form of a formal session sitting classroom. There were also role-plays done to simplifying the content of the modules." (Facility Manager 1 - Facility B)

Therefore, the participants were of the view that the different modalities enhanced the objective of the training, which was to relay the knowledge and skills in a participatory format. A District Trainer explained:

"I think we learned that participative learning was very important, involving CHWs. Allowing them also to be given tasks, to come and give feedback, to come and teach some of the lessons that they know in class, really helped a lot." (District Trainer 2)

The training was also reportedly a combination of classroom-based learning and onsite practical learning. This involved the trainers accompanying the CHWs to households to introduce them to the practical dynamics that they would expect after the training. Moreover, trainers also used the training's practical components to monitor the extent to which the CHWs could manage and/or deal with patients' emotional and psychological dynamics during a household visit. One of the trainers mentioned that:

"So, we help them also to be able to assess clients emotionally and psychologically. When it comes to that, I go with them to households. I go with them to see if they can assess the psychological and emotional state of a client. Again, to check if they can make correct judgments on whether to talk to a person when they enter households. Or are they able to cut off their conversation nicely and professionally and thanking the client and leaving the client peacefully." (NGO representative/trainer 2)

Therefore, training methods involved a combination of in-class, role-plays and practical work which gave CHWs some flexibility to absorb the content in different modes and environments to enhance their learning.

3.5.1.3 Accommodation of languages

It however emerged that a key challenge was that the training was conducted in English. This proved difficult for those participants who did not have the requisite qualifications or minimum educational standards. To avoid challenges faced by those with less command of the English language, trainers had the space to translate content during training into the local language of CHWs. A coordinator mentioned that:

"When you train the community health workers, sometimes the challenge is that everything is in English. Therefore, there is a language barrier, but for me, this is positive in that if they read something in English and translate it, this means they have understood it. Using English can also be an advantage because CHWs have to make sure that they understand something before translating it. English is used in the training lessons, but they are free to use whatever language they speak in the practical" (WBOT Coordinator 1 - Facility B)

A CHW explained her own experience as follows:

"They were teaching us in English, but if when you responded you wanted to use your language, they would allow you" (CHW 3 - Facility B)

Therefore, the design of the training was suitable and sensitive to the diverse nature of CHWs' backgrounds taking into account their varying levels of educational qualifications and work experiences. The narratives above also indicate the level of effort put into using a range of methods to instil knowledge to the CHWs and prepare them to provide services (including facilitators with diverse expertise) despite some noted challenges.

3.5.2 Successes in equipping CHWs to fulfil roles

Participants were able to provide their perspectives on the training and the areas that they felt enabled CHWs to fulfil their roles and meet households' needs. Most of the knowledge areas gained were mostly related to their preparation to encounter diverse needs, their roles in chronic care, including their capacity to provide counselling and to communicate in an accessible way.

3.5.2.1 Training designed for diverse household needs

Participants reflected on the extent to which the training prepared CHWs for the work they were mandated to do. Most believed that the training helped to empower CHWs with the knowledge and skills required for their job. This included activities that exposed them to issues they would have to deal with daily when they were in households. The Provincial Representative stated that:

"So, this training provided a light for them to know exactly what was expected of them in the household because they had to go to the household not to look after the bedridden patients but to look after the whole household. To look after the child who is under five years old and sick and pregnant women, patients who are on chronic medication, so it was to enlighten them and for them to be empowered, so it's empowering them to go to the household." (Provincial Representative)

Some of the participants further reflected on how the training enabled the CHWs to function and respond to a diverse range of situations. They noted that one of the strengths of the training was that it equipped CHWs with critical thinking skills to make rational decisions in the field. This is pertinent as they were bound to address each households' needs differently. The district manager mentioned that:

"The training is based on what is happening out in the households. We know they will come across different types of challenges, so we wanted them to know exactly what to do. For example, when they find a poverty-stricken family, they know that there's social development. If they come across somebody who presents signs of TB, they would know what to do…they

will be in a position to interview them further to confirm and refer appropriately." (District Manager)

The Provincial Representative from the DoH weighed in on this sentiment:

"I think with the knowledge they received from the training I know they got, and they will be able to impart whatever information to the community members. Because with that ten days phase 1 training they had to do, they gained a lot of knowledge, with skills I think gained from the 5 days practical so maybe they gained skills but with knowledge." (Provincial Representative)

Some participants further indicated how the training prepared and enabled the CHWs to respond to community needs. Some believed that they would not have been able to apply those skills were it not for the training. The facility manager noted as follows:

"*In the first place, they wouldn't be able to do vital signs, which is the first point of assessing if a patient is well or not, and they wouldn't be able to do counselling when they have to test the patients for HIV… and things like dressings you wouldn't know what the wound needs or how to clean the wound if you were not trained. So it has prepared them to be able to work in the community; if they didn't have some formal training, I don't think they would be able to do it."* (Facility Manager 1 - Facility B)

This suggests that the training was sufficiently comprehensive to prepare the CHWs for diverse issues that they would encounter in the communities. Being able to address each situation accordingly was, therefore, the significant knowledge gained by the CHWs.

3.5.2.2 Communication and counselling skills

CHWs opined on the success of the training, adding that it helped them improve and acquire soft skills such as communication and counselling skills. Over and above the skills and

knowledge gained to perform their duties, they mentioned that training also provided them with personal skills to know how to deal with people and personal issues. One CHW noted how the knowledge and counselling skills gained from the training earned her the trust of people such that they would reach out to her when in need of advice:

"But when I started to do this work and I was taught counselling, and then I began to counsel other people, I can teach someone and tell them about me. I am also able to meet with people, and even my children I can teach them. I am an important person in the community now. They can come to my home; they can come and ask me for help as they can see that I also got helped." (CHW 1 - Facility B)

Another CHW indicated how they were able to have difficult conversations through counselling:

" I love the part on Counselling, the training on counselling, it has helped me because it enables me that when I am sitting with my parents even though I will not be able to tell them straight away that they must go for testing, but I can counsel them. I am hoping that maybe they will go and test so that they can know their status." (CHW 8 - Facility B)

While another reflected further on this skill gained through the training.

"The part that I love is counselling because you see a person needs to be counselled in any situation. I know that there is one word that will afterwards encourage the person in counselling and convince them that the counsellor is speaking the truth. Counselling is very important to me that I loved because many people have come out because of counselling since they were given information". (CHW 7 - Facility B)

Another CHW commented on the extent to which communities respond and follow the education and advice they provide which was gained from the training. This reportedly gave them a sense of pride in that their work had an impact on communities:

"It (the training) was successful because as we are counselling them, teaching them about the importance of treatment, as they go to the clinics, they also encourage us as we see that our work moves forward. Since they respond to what we bring to them, it also makes us proud; we feel encouraged that this training has helped us and our work also moves forward." (CHW 5 - Facility B)

Other stakeholders also had their perspectives regarding training and the communication skills gained by the CHWs. They indicated how it equipped them with the capabilities to be active agents in transforming their communities. They also noted how they were taught essential elements such as approaching households and discussing sensitive information with household members. A representative/trainer from an NGO stated that:

"I would say interaction with clients because they are very strong in communication skills. We had to teach them to be able to communicate successfully in households and how to establish a rapport. We had to teach them how to ask questions sensitively, such as when the last time was you had sex. We taught them communication skills so that they can roll out whatever objective that they have for the household." (NGO representative/trainer 2)

3.5.2.3 Skills in chronic care: HIV and TB

Participants further provided their perceptions of the training and the benefits thereof. They indicated how, through the acquired information, they improved people's knowledge in recognising the signs of chronic diseases such as TB, such that they were able to increase the number of people referred to clinics. One CHW commented as follows:

"What was successful about training that I liked was being trained on how to give health talks in households—teaching people about TB, signs, and symptoms. People were now able to recognise that this is a sign of TB. Due to the training, we got many people with TB and referred to the clinic." (CHW 3 - Facility B)

Moreover, CHWs were reportedly also capacitated to work with children and HIV patients, often seen as specialised fields. This was seen as an added advantage for the CHWs and enhanced their care for the children on their caseload and patients living with HIV. One team leader mentioned that:

"They are very strong in the HIV issues and children." (OTL 1 - Facility B)

3.5.2.4 Social determinants of health

Participants indicated how training enabled CHWs to respond to household issues beyond those related to health by identifying and referring households to social issues that affect their health. This, therefore, enhanced their role in dealing with the social determinants of health. The Provincial Representative indicated that:

"They are looking at a whole lot of other things that may impact negatively on the health of the household. So they can assess when they get to the household and focus on everyone there and not just the sick patient, children, pregnant women, elderly, etc. So I think this training has prepared them because they go even beyond, I have mentioned social problems, they can identify and refer to relevant services." (Provincial Representative)

3.5.2.5 Skills in Maternal and Child Health

Considering that one of the key goals of the WBOT programme is to improve maternal and child health (17, 19), the CHWs believed that the training armed them with sufficient knowledge to guide pregnant women in their communities. One CHW mentioned how training on antenatal care (ANC) was a key highlight in the curriculum:

"I loved the part on ANC because some of the pregnant women sit at home and not go to the clinic; there are some of them who say they want to go to the clinic when they are seven months, eight months, and that thing is dangerous because there are those who say they just want to go at once and then give birth. I loved ANC because I think I have a bit of bad luck or good luck of finding pregnant women; when I find pregnant women, I refer them to the clinic to know that there are dangerous signs of pregnancy. That is what I loved". (CHW 5 - Facility B)

Breastfeeding and care of the baby were also key issues that CHWs found helpful from training as part of MCH. One CHW stated that:

"I loved the part on breastfeeding a lot so that the mother can know how to breastfeed the baby. How many times per day or night must she breastfeed the baby, and how must she hold her breast when she breastfeeds". (CHW 4 - Facility B)

Another CHWs further commented that training enhanced her understanding of post-natal care and review of children's road to health card:

"I loved post-natal, about when a child has just been born. I learnt a lot because when I arrive to find a child born, I must check the umbilical cord, and then I must teach the mother how she must take care of the umbilical cord and what she must do with it. And then I must check the baby's clinic card and that the mother must take the baby to the clinic for weighing and check-up properly and then I must check the baby until the baby finishes five years because you start the baby at birth until the child is over five years". (CHW 1 - Facility B)

3.5.2.6 Career progression

Interestingly, one participant commented that the training could be considered a success story because the participants recruited with varying literacy levels moved on to other careers such as health promotion and even nursing. A district manager stated that:

"The training was successful because when we employ somebody, sometimes we take people who don't know anything about health, and then we train them, and they learn. Some of them become health promoters in the end. Some of them go to nursing because of the community healthcare worker program." (District Manager)

One can gather from the views above that the training was comprehensive as it covered a broad range of diseases and health issues that CHWs are confronted with within their communities.

Moreover, the curriculum was sufficient to enable some CHWs to move onto other professional categories within health.

3.5.3 Perceived gaps in the training

Participants went on to point out areas that they perceived to be gaps in the training that otherwise could have been beneficial for CHWs to function in the contexts in which they provide services. This included aspects such as the tension between western notions of health and cultural practices, the extent to which the training provides tools for CHWs to respond to multiple households needs and the extent of revisions conducted to update the training content. These views are expanded on below.

3.5.3.1 Western-oriented content vs cultural beliefs

What is apparent from the above views is that although the CHWs had gained competencies in different areas due to the training, they also had limitations in other content areas. It was indicated that CHWs found it difficult to effectively negotiate the contradictions between existing cultural and traditional beliefs and practices from communities and 'western' health practices and ideas. A Provincial Representative expressed this observation, stating that CHWs seemed not to be able to manage and respond to issues related to cultural beliefs in their consultations in households:

"It is difficult when you are a young inexperienced person to convince a mother not to do harmful things because she has done that for her previous pregnancies. She inserts some funny things on the umbilical cord of a newborn baby. She believes that it is correct, yet this might be wrong from a medical opinion. It is out of scientific opinion. One needs to be very careful about approaching a mother who has such a belief to change their practices successfully. This is what some CHWs fail to handle." (Provincial Representative)

This, to some extent, indicates a gap which the authorities ought to consider in future training curricula.

3.5.3.2 Managing additional health needs

The training of CHWs was evidently in line with their roles and responsibilities, and they had the competencies to perform some of their tasks. However, participants also indicated that the training was limited, hindering them from dealing with mental health issues.

"Mental health I think is one area we have little information about." (District Trainer 2)

Moreover, although mental health was not included in the training (and was reportedly considered in the revised curriculum), CHWs were still expected to provide support to those households that had members with a mental illness. One of the District Trainer expressed this as follows:

"Yes, what I would say is that we didn't have a mental section in our training, but we have an expectation for them to support the family, so the client adheres to treatment so that it doesn't flare up or relapse, but we didn't have training on that, and it only came now when we did the upscaling." (District Trainer 1)

Although there was a sentiment that the training prepared CHWs to manage a range of issues, some participants contradicted this view. A few noted that the training was insufficient to prepare the CHWs to deal with households with multiple needs. The same trainer explained this scenario:

"We are overwhelming them because initially when the program started, they were supposed to focus on maternal and child health but now they are out there, they can't ignore a mentally ill patient within the household, they can't ignore if there is a TB patient, so they end up having to do everything that they come across within the household." (District Trainer 2)

One of the trainers was also of the view that the content on TB could be more in-depth, considering what they encounter in the community. As opposed to screening and referring, they were of the view that there was a need for providing more education on TB treatment and adherence:

"We want them to give more health information, talk about TB, talk about treatment adherence, talk about side effects, but it is a challenge to them because they are not competent to talk to clients about treatment adherence and side effects." (NGO representative/trainer 2)

3.5.3.3 Insufficient updating of training content

A few participants indicated that the training CHWs received was not updated frequently to match the changing circumstances and requirements within their work. For instance, unlike prior ways of practising, there was an added requirement for CHWs to provide data electronically. This was reportedly regardless of the lack of training on how to use gadgets for data collection. A WBOT Coordinator stated as follows:

"Another challenge that we have is that they have given the Community Health Workers gadgets (mobile data collection tablets). Before they were given different gadgets, which worked in a particular way, they have been given other gadgets that are more advanced. They expect them to work, but they haven't been given any training. And they expect stats from them." (WBOT Coordinator 2 - Facility A)

Therefore, despite the acknowledged importance of using technological equipment (gadgets) for capturing household information and service provision, there reportedly was no update of the training to coincide with the required changes in the use of technology in the CHW's work.

Adding to the lack of updating the content of the training, participants indicated that although their initial training equipped them with basic knowledge on prevention and monitoring of diseases, this was not updated in line with the changes in the current treatment and care guidelines. One team leader mentioned that:

"Because whenever you do in-service training with them, you can hear that they were talking about the things of the way back in 2012, now we were in 2017. Like in HIV, some people are still using those three drugs, and then we told them that 'no, we are no longer using three drugs'. So, I think on the HIV side, they have to get their training more often because whenever something changes, they have to know because they are working within the communities." (OTL 1 - Facility B)

The Team Leader went on to mention how they sometimes filled in the new knowledge in their ad hoc fashion:

"Because of new research, things are changing, but they are not updated on that. I will only give new information from my research and reading when I google for information or receive information from the South African HIV Counselling Society. I am a member, and they are always sending me information." (OTL1 - Facility B)

3.5.3.4 Limited Monitoring and Evaluation

Another perceived gap in the training was the lack of a monitoring and evaluation process of the training, which could compromise the extent to which the implementation curriculum could improve. One District Trainer highlighted this as follows:

"I'll say there's very little of that, because we, I go back to me now in the sub-district, I would have a database that says these were trained in phase one and these in phase 2, and the district office may require that number sometime, but there is no system, CHWs are many, we don't look at that and say we have a little number, lets push and do this, it's not done that way, to an extent now that we left phase one and two are in upscaling." (District Trainer 1)

3.6 Factors constraining training implementation

Participants pointed out several constraining factors that compromised the implementation of the training. These are explained below.

3.6.1 Inconsistent selection criteria on training

It was interesting to learn that CHWs had been recruited into the programme in varied ways. This ultimately influenced how the training was facilitated to accommodate this variation. The first consideration for the recruitment and selection of the CHWs was their residency. Participants mentioned that CHWs were sourced from the communities they resided in. It was indicated that they should live within communities they serve, in the defined areas they come from. The participants further explained that individuals were more likely to be recruited from areas where they resided as common practice. A district manager indicated that:

"So, they will go through the applications and check people according to their catchment area. Ideally, they should be appointing people that are in an area they are residing within." (District Manager)

Another form of recruitment was the consideration of literacy levels. This entailed the most basic education level, such as reading and writing; however, proficiency in English was not a priority. A facility manager noted:

"At least grade 8 with the ability to read and write, there is little proficiency in English." (Facility Manager 2 - Facility A)

However, there was an instance when no educational qualification or literacy levels were considered. This was reported because the Department of Health, during the time of efforts to consolidate and revise the CHW programme, inherited CHWs that were already in the pool of those providing services and were part of the existing community-based health sector. One of the facility managers explained as follows:

"CHW's currently within the department were inherited from NPO's (Non-Profit Organisations) operating in the communities funded by the department, and when the program (WBPHCOT programme) started, we used the very same CHW's. So, there were no criteria set in terms of literacy level, so you find that some of them don't have grade 10. They were

volunteering in the community because they had a passion for working with people in the communities. When we inherited them, we inherited everyone irrespective of their educational background, so there is that mixture. We can't say we have so much with grade 12s, but we had those when we started that were not able to read or write, but we inherited them." (Facility Manager 1 - Facility B)

The participants also indicated another aspect that was considered in the selection and recruitment of CHWs. They suggested that working experience was also recognised. This was confirmed by one of the participants who expressed how work experience was also an important aspect when recruiting and selecting CHWs. They noted as follows:

"It is the experience that counts more for the CHW position than a Grade 12. If someone has Grade 11 or Grade 10 but has years of experience in the field, you will rather take that one. (WHO and UNICEF) Firstly, we look at the experienced people who are trained in the field. They might have academic certificates but are certificates in HIV Testing, TB adherence, etc., these are the people we consider the first look. We look for those people with the most experience, and then if you still have the space, we go for those with the little experience, and lastly, those without experience but with school qualifications." (WBOT Coordinator 2 - Facility A)

Moreover, applicants' work experience received priority because that reportedly implied that they had some prior training and therefore had the relevant skills and knowledge. This positioned them at an advantage during the oncoming training after they were recruited and when performing their duties in the communities:

"Some of them were trained on the 69, they call it 69 days training course on community healthcare workers, and because of that, they were taught some of the basics like the taking of temperature, blood pressure, urine and weighing of patients." (Facility Manager 2 - Facility A)

It is evident that some of the applicants reportedly had basic knowledge and skills in community health worker work when they were recruited. The above view also highlights the significance of work experience compared to the qualifications.

The previous sections have shown how appointments of CHWs were based on varied considerations related to the criteria which were influenced by past practices. Even though qualifications and experience have been alluded to as a requirement for employment, there were no (strict) minimum requirements for CHWs. Participants, however, also indicated another factor that led to the recruitment of other CHWs. Interestingly, the district (during the period of recruiting CHWs) was reportedly under duress to recruit all CHWs, including those from various NGOs, due to protests by CHWs. A district manager mentioned that:

"They are supposed to have at least matriculation, but because initially, when we started working with them, we took them over from the NGOs. The NGOs just employed everyone for the sake of them doing home-based care. So, we were unable to exclude some of them because they went on protests when we were not employing them, and the department was forced to employ them." (District Manager)

The views regarding recruitment and selection of CHWs indicate how a range of factors influenced the processes. This presented a range of compromising factors in the way training unfolded during implementation. This is further discussed below.

3.6.1.1 Supplementary training for varied literacy levels

Despite the varied and mostly positive views on the training's adequacy, some participants highlighted some challenges. They indicated that the CHWs needed further information to supplement the already provided training due to the varied literacy and qualification brought on by the varied criteria for selection. They reported that the training was insufficient to accommodate the different levels of comprehension adequately; hence, they held weekly in-service training. One trainer stated that:

"The training is still not enough because their level of comprehension is not the same, so we still do continuous in services, because every Friday they sit and don't go out." (District Trainer 1)

3.6.2 Duration of training and content overload

Considering that Phase 1 was delivered over a ten-day duration, the participants believed that a lot of content was given to the CHWs and were expected to grasp it within a short period. The Provincial Representative stated that:

"I felt that it was too much information to be shared in a short space of time- within 10 days. You would find that some trainers have to rush through modules because they are aiming to complete the module within specified times. It was too much information for that time. If there was time for two days to do certain modules in class and maybe for another two days to do practicals in the clinics or households". (Provincial Representative)

A trainer from the NGO further explained:

"I would say the 10-day training, which is Phase 1, is very intense. So for a community healthcare worker that is newly employed, it's good to train them in their component, but for me, it's very intense because even you as a trainer you leave there, you ask yourself; 'I know the subject matter, are they filled up with the knowledge?". (NGO Representative/trainer 1)

While another trainer added:

"Ya we found a lot of challenges in training…that the training period was too short. At least if it was a month, they would take it in bits and pieces and say, let us do this in 2 weeks and in a period of 2 weeks, we will go back to training and be prepared but not 20 modules in 10 days. It was a lot for them and a lot for facilitators because you'll find they are only 2 in class, and you have to do a lot of work". (District Trainer 2)

These views seem to imply that CHWs were overloaded with information which could have hindered their ability to sufficiently grasp during the training in Phase 1. However, to circumvent this possibility, it was noted that the CHWs were provided with a summary of the manual which they used during six months of practical application in the community. The Provincial Representative noted that:

"Training covers a lot of information. It is a huge manual; I think it is 500 pages. So, the training is for 10 days, but then the community health workers do have the Tool Book, which is a summary of that big manual, and then with the Tool book they need to go out in the community, and they need to do practical's for six months." (Provincial Representative)

3.6.3 Venues, transport, and access

Participants provided additional factors that had an impact on the implementation of the training. For instance, some participants commented on issues related to the training venues and access to them. On the one hand, the CHWs indicated that one of the venues in which training was conducted was appropriate in that it was a hospital and therefore easily accessible, as mentioned below:

"I liked the fact that we had training at X hospital where there are nurses. It was not difficult to get to the venue because it is somewhere where we know, it's a hospital that we sometimes go to." (CHW 4 - Facility B)

But on the other hand, although favouring the venues, they also reported that sometimes going to them posed a challenge because they were not subsidised to travel to attend. CHWs mentioned that some of the training venues were often far, and they had to use two taxis[6] to get to the venue. One CHW mentioned that:

"Hospital X is too far, we have to use two taxis, and there is no transport. But, the venue is the right place because it is a hospital, it is a cool and quiet place, there is no noise such that we can understand when they teach us." (CHW 4 - Facility B)

[6] Public transport mini buses

Another CHW commented as follows:

"It is far, the place is very open it's big. For me, it was a challenge to get to the place because we do not have a straight taxi (a taxi that goes directly to the venue). We have to catch two taxis. If I want to use a single taxi, I will have to walk to the main road to go catch the taxi, and it is far." (CHW 5 - Facility B)

Even though CHWs were notified on time about training dates and venues, it was reportedly a challenge for them to come because of transport. This was attested to by a team leader who stated that:

"There is no transport to the venue. It does cause problems because sometimes you say 10 people must go for training and a few come because others will say I don't have money to travel to that place every day. It is more or less R30 ($1.83[7]) per day, so it's a lot of money for them." (OTL 1 - Facility B)

3.7 Factors to improve training

Most of the participants had several views regarding how to improve the training to address some of the identified gaps. This included grouping CHW according to competencies, using Phase 1 as the determinant to progressing to the next phase of training, using external expertise for specialised topics, an iterative combination of theory and practical learning, and in-service training. These are expanded on below.

3.7.1 Literacy-based CHW groups

Most of the participants involved in the training were concerned about the variation in the literacy levels of the CHWs. They were mostly concerned that due to time pressure, the pace of the training sessions tended to move with those who grasped the content the quickest while leaving those of less literacy behind. They believed that the programme could ensure that all

[7] Exchange rate on 27 December 2020

CHWs are uniformly capacitated by grouping them according to competencies and education levels. One of the trainers suggested as follows:

"…the level of comprehension for the CHWs differs. That is why my thinking is that we could have groups of CHWs… those who are at a certain level of education could be grouped to one side and those who are at a certain (another) level group them to the other side. Not that we separate them but to have a very clear idea that these ones are grasping slowly and the others are fast because even in the classroom you are able to realise that this one understands much quicker than the other one and because of the time frame, you are not able to go back and help those who grasp slowly because we have to move…" (District Trainer 1)

3.7.2 Baseline training

Some participants were also concerned about the extent of variation in the CHWs knowledge and skills due to how different groups attended the different training levels. Some suggested that the Phase 1 training should be considered the baseline which all CHWs should complete before moving to the next phase. They opined that to some extent, it would guarantee that all the CHWs in the system have the basic training and can provide some basic level of care. One of the participants said:

"My recommendation is the Phase 1 of the curriculum that we used should be a baseline for all CHW because it's an orientation of all the conditions and expectations that the CHWs should do. So all the CHWs should go through Phase 1 training before we go to the other training and it should be an ongoing thing so that all the CHWs go through this training then we have all CHWs trained in Phase 1 and whatever comes then they have the basic…" (District Trainer 1)

3.7.3 External experts

Some of the participants were in favour of continuing a component that has subsequently been added to the programme. This involved the invitation of people who were experts in specialised fields to provide practical experiences to the CHWs. A trainer commented as follows:

"…allow other expert facilitators to be involved like in modules like TB, invite people who know how to treat TB, invite somebody who knows about HIV…" (District Trainer 2)

3.7.4 In-service training as a supplement

The participants were supportive of the notion of incorporating a regular practice of updating the content after the formal training. They were of the view that in-service or continued training at the clinic could assist in keeping CHWs up to date with new developments on treatment and approaches to care:

"…they need in-service to keep up with what the new developments and I think it will do them good sometimes to come into the facility and be with the clinic staff like the enrolled nurses and nursing assistants and see what is being done in the facility and then with what they gain they can use in the community." (Facility Manager 1 - Facility B)

3.8 Conclusion

The chapter has captured the roles and responsibilities of CHWs and the extent to which the training accommodates and ensures capacity and knowledge to execute those roles. Overall, participants were of the view that the training was a success and provided CHWs with the necessary skills and knowledge to perform their work. However, some challenges were noted, such as varied literacy levels of CHWs due to varied criteria for selection and recruitment. This required supplementary training to accommodate this variation. It also highlights how recruitment sometimes does not consider minimum qualifications and how prior experience poses repercussions on how well CHWs learn and understand what they are being taught. It is also apparent that further training challenges need to be addressed for them to be fully equipped and resourced to do their work. These challenges included giving CHWs too much information during training over a short space of time; lack of updated training content to match changing environment on policy and guidelines; lack of provision of resources such as transport to training venues, and the introduction of working (technological) equipment with no training on how to use them.

CHAPTER 4: DISCUSSION

4.1 Introduction

This study aimed to understand and document the experiences and perceptions of the implementation of Community Health Workers (CHWs) training by CHWs and relevant stakeholders within Ward Based Outreach Teams (WBOTs) in two sub-districts in the Tshwane district. The results of this exploratory study show that CHWs assumed multiple roles and responsibilities, including the provision of health education and promotion, referrals, home-based care, the distribution of medicines and the conducted screening and household registrations. Other roles extended beyond health-related issues in that they were involved in addressing the social needs of the community. Although there were mixed feelings with regards to the implementation of the training, the overall sentiment regarding the content of the curriculum was that it was a crucial factor in enabling CHWs to carry out their roles and responsibilities and to respond to community needs. The key areas that were noted to be a gap in the training included the insufficient updating of the curriculum to ensure that it aligns with current information. In addition, due to the nuances that are presented by the context within which CHWs work, there was a need to build in components that are sensitive to aspects such as cultural practices or beliefs into the curriculum.

This chapter synthesises the main findings and discusses them within the broader literature on the experiences of training CHWs in other similar settings. It further consolidates the key themes and sub-themes that include the roles and responsibilities of CHWs; the experiences and perceptions of training focusing on the content and knowledge areas of the training; and the facilitators and barriers to the implementation of the training, where issues related to the duration of the training, the implications of varied selection criteria on training and the cultural considerations in the training content are discussed.

4.2 CHW roles and responsibilities

The findings in this study revealed that the roles and responsibilities of CHWs are wide-ranging. Furthermore, the roles were aligned to the goal that is detailed in the WBPHCOT Policy Framework and Strategy (19), which notes that teams are required to have a comprehensive scope of work. Although nuanced, the CHWs in this study were involved in roles such as household registration, health information dissemination, curative care, provision of data and those activities that related to issues beyond health. However, their primary focus was on preventative care, chronic care and MCH. These roles are similar to those in other settings in LMICs. For instance, some evidence shows that CHWs have enabled improvements in child nutrition intervention and the promotion of exclusive breastfeeding care. They have also contributed to the support of children with malnutrition and micronutrient deficiencies (58). Furthermore, an evaluation of a large-scale CHW program in Mozambique showed that there was a substantial reduction in the prevalence of childhood undernutrition (101). Perry et al (30) add that during maternal home visits, CHWs will recognise pregnant women, provide basic education, promote clean deliveries, provide vital infant care, assist with healthy practices after birth, and promote immediate breastfeeding. Reinforcing the findings in my study about the importance of CHWs in MCH, Daviaud et al (102) showed that they can play a crucial role throughout pregnancy, the post-natal period and early childhood, saving the lives and improving the health of young children and their families. Seeing that the provision of MCH services was a strong part of CHWs roles in my findings, they play a crucial role in meeting the key goal of the WBPHCOT policy framework which is for CHWs to conduct home visits during pregnancy and the post-natal period to identify any problems and ensure safe births (19).

Similar to my findings which illustrate their role in prevention and health promotion, a study conducted in Kwa-Zulu Natal in South Africa proved that CHWs delivered appropriate health promotion messages to mothers in a way that they understood (103), thus infusing their preventative work in MCH services. As in other settings, CHWs in my study reflected on their extensive provision of counselling particularly within the realm of HIV/AIDS. For instance, in addressing the shortage of human resources and provision of comprehensive HIV services, CHWs have been involved in counselling patients especially in more rural settings at the peak of HIV/AIDS infections in South Africa (104). This is not surprising, as it is known that CHWs'

work in South Africa was historically rooted in these areas of health care. Their role in counselling is now evident in other chronic care services such as mental health. A study in the Western Cape aimed to assess the feasibility and acceptability of CHW-delivered mental health counselling services yielded positive results (105). Showing improved retention of patients in counselling with evident acceptability of the service, the study resonated with my findings that CHWs continue to be an integral resource in promoting counselling approaches to chronic care services.

Although the findings of this study show the active role of CHWs in providing services related to chronic diseases, these were confined to mostly TB and HIV/AIDS. Several studies in South Africa support the strong involvement of CHWs in a wider range of chronic care services such as NCDs, TB screening, referral and linkage to care for further management (106). Studies in different South African provinces illustrated the effectiveness of community teams on HIV testing and disclosure (107) and ART uptake and adherence in adults and children (108). In addition, a review (109) of the effect of CHW-led services for the prevention and management of non-communicable diseases such as diabetes showed how this cadre played an important role in improving knowledge, health behaviour and health improvements related to type 2 diabetes mellitus (T2DM). The clear potential of this workforce in addressing chronic diseases as illustrated in my study further highlights the need to provide supportive mechanisms for CHWs in order to improve chronic care in PHC settings.

Considering that South Africa is still confronted by a quadruple burden of disease - characterised by the co-occurrence of infectious diseases such as HIV/AIDS and TB; child and maternal mortality ; non-communicable diseases; and violence and injury (110), the findings of this study also showed that the roles of the CHWs went beyond health-related issues and in that way, they also offered services related to the social determinants of health (SDH) which play a key role in perpetuating the impact of the aforementioned diseases. The findings illustrated that they were involved in activities such as referrals to social services for patients to access social grants, assisting patients to obtain identity documents, providing health talks on the importance of hygiene and clean environments – hence addressing issues regarding dumping in communities. A few studies in South Africa were in agreement with my findings.

They reported that in other South African provinces, WBOTs engaged other social/welfare sectors such as Social Development, Social Security Agency of South Africa (SASSA) and the Department of Home Affairs in relation to households accessing social grants. Moreover, they have reportedly been involved in community inter-sectoral forums, including working with political structures (111-113). This is a positive finding as it has been shown how households in poor settings have multiple needs that go beyond health, but which indirectly affect their health. However, it should be noted that despite the substantial role that CHWs can play in addressing the social factors that affect health, it is reportedly often with limited support (13). The role of inter-sectoral action to effectively mobilise different sectors to respond to the different needs requires training and support. Schneider et al (13) opine that CHW teams require further support from health professionals such as environmental health practitioners, a cadre that is in most instances absent but a required component in WBOTs. Assessing from my finding regarding the extent to which the activities related to inter-sectoral action consume a large number of their activities in the communities, I concur with Schneider et al (13) who noted that this role should be duly recognised and that the training of CHWs should focus on the social determinants of health and provide skills for community mobilisation (13). Consequently, the one lesson that the Covid-19 pandemic has provided is how social factors, ranging from unemployment to spaces of living, can have exponential effects on the health of communities. This is a crucial factor to take note of as South Africa aims to strengthen UHC through the use of CHWs.

This study indicates that CHWs were also involved in the collection of data used for routine reporting. The data that CHWs collected in households and communities through household registrations and screenings is reportedly important to facilities for reporting quarterly and for local use and planning. The findings further showed that this cadre played an important role in providing data for decision making in the facilities where they were based. Olaniran et al (62) highlight the importance of this role and substantiate this finding. They state that once CHWs capture data, it is packaged and assists in providing feedback on community needs and priorities to the health facilities they are linked to. The data that CHWs collect play an important role in supporting implementation and addressing programmatic gaps and decision making at programmatic, policy and political level (62). Notwithstanding the findings in my study regarding the CHWs' pivotal role in data collection and contributing to the reporting

system, Murphy et al (74) highlighted the constraining aspect of this role. In their study, the authors indicated how it was considered a time-consuming exercise, especially in light that the process was conducted with limited electronic resources. My study may have not highlighted the time aspect, but it resonated with Murphy et al's (74) findings on electronic resources, where the CHWs had to use electronic gadgets for which they were insufficiently trained to operate. This limitation has been observed in other studies (22). Current efforts to improve the involvement of CHWs in the strengthening of PHC will need to consider more supportive mechanisms for collecting data and reporting.

This study shows that CHWs also assumed some roles in curative care in the community. They were primarily responsible for ensuring the provision of Vitamin A amongst children including deworming. In agreement with the findings of my study, many studies show that CHWs play a crucial role in child survival interventions, including immunisation. Through an important role of its female community health volunteers (FCHVs) vitamin programme, Nepal has remained one of the few sterling examples in LMICs to meet the then MDG4 (child health), currently SDG 3.2 due to its consistent focus on PHC and community-level interventions (114). Despite the noted finding in my study, it was indicated that their scope within curative care was limited, which prevented CHWs from operating at their full potential. This is more so because a review indicated that CHWs that are tasked to provide curative services beyond the other responsibilities such as only education and/or psychosocial support are more likely to be more motivated (111). Despite the evidence that CHWs are capable and more resourceful when they are enabled to provide curative services, this study's findings indicate that the training does not include any component related to curative care. Considering this sentiment, it may be of benefit to explore the possibility of expanding the role of CHWs in curative care in South Africa's national programme, in ways that do not expand the volume of their work but rather compliment it.

It is clear from the findings in my study that CHWs provide a wide range of services that are comparable to other settings in LMICs and as expected in the roles outlined in the policy. And as illustrated by their history in the South African health system, this study shows that those roles have changed over time. This resonates with South et al (115) review which illustrates that the range of roles that CHWs assume vary based on context and evolve. Moreover, the goal of achieving UHC has also required that CHWs take on comprehensive functions to ensure

sufficient reach and effective PHC. However, it is important to bring to light that there have been emerging debates about the extent to which CHWs can assume all these roles without compromising the quality of care. A review highlighted studies that indicated that the more roles and functions CHWs took on, the more there was the potential to reduce their productivity and quality of care (116). As much as there does not seem to be an apparent official understanding of the optimal set or load of tasks to determine CHW productivity in LMICs in general (117), this is something policy-makers need to be mindful of in future policy decisions regarding the scope of work for CHWs in South Africa. However, despite the existing debates, it is evident that the more CHWs provide comprehensive services in marginalised communities, the more they can play a crucial role in sustaining much needed care during pandemics such as Covid-19, especially in light of the challenges and shortages of human resources for health.

4.3 Experiences and perceptions on training

4.3.1 The content and knowledge areas of the training

This study identified that the training of CHWs covered a wide range of content, hence attesting to the participants' view that it to some extent prepared the CHWs to face the health needs of the community. It showed that the content of the curriculum was comprehensive and aligned with the goals of the PHC re-engineering (17). Moreover, the content was also aligned to the roles and responsibilities as defined in the WBPHCOTs policy framework (19). The curriculum focused on the orientation of the PHC system and its link to the community and reinforced their understanding of their role as a necessary intermediary. This study showed that the training focused on the concept of the health system and community-oriented primary care (COPC), focusing on the four disease burdens (HIV, TB, STIs, mother and child mortality and morbidity) mainly in the first phase, while the second phase of the training grounds them with expanded details that touch on social issues such as violence to lifestyle diseases. These broad ranges of roles are consistent with the training content that is covered in other sub-Saharan African countries that have CHW programmes. Although there are noted inconsistencies in the content across these countries, they at most cover knowledge areas such as HIV/AIDS, malaria, maternal, newborn, and child health, hygiene and reproductive health (3, 11). For instance, Ethiopia's CHW training programme with its Health Extension Workers (HEWs) includes 15 modules covering four knowledge areas such; disease prevention and control, health education

and communication, family health services and hygiene and environmental sanitation (24). Countries in the South Asian region cover knowledge content that is comparable to that in sub-Saharan Africa. For instance, the training programme for Pakistan's Lady Health Workers similarly covers content in MCH and family planning services, HIV/AIDS, patient record keeping and basic curative care (24).

Although the cited examples of CHW training in the LMICs (i.e. Ethiopia and Pakistan) show that the content generally addresses high-priority health issues, there seems to be a dominance of health-related content while social issues remain crucial in determining the health of communities. Several studies indicated how a lot of the CHW pre-service training in LMICs lacked knowledge areas in "soft skills' to enhance skills such as interpersonal communication and relationship-building (66). It is therefore positive to note that the findings in this study indicated that the training focussed on counselling skills. Participants applauded this and noted that CHWs developed communication and counselling skills in ways that enabled them to negotiate and understand the circumstances of the local communities in relatable ways. Resonating with my study findings, a study conducted in the Western Cape showed that before being offered training on mental health counselling, CHWs were not confident in providing such services. However, after the training, they were happy and acknowledged that additional training and more opportunities for counselling skills rehearsal improved the quality of counselling (105). In several reviews (111, 118, 119) is noted that it is important that the training of CHWs not only focus on the technical aspects of their competencies but also skills in socially-oriented competencies. Interestingly, another review pointed out the importance of including problem-solving skills in CHW training (70), a component of the training content that was not evident in my study.

However, a concern that was illustrated in the findings in this study was that although CHWs were expected to play a role in mental health care and ensure that patients with mental illness adhere to their treatment, the training lacked content in mental health care. Although research in other settings show that CHWs can play an important role in mental health care and have seen successful experiences in using this cadre (105, 120) the extent and level of training that CHWs require to effectively conduct these functions remains to be established (120). In light

of the expected increase in mental health services during and post-Covid 19, training in this area should be considered in the WBPHCOT programme.

4.3.2 Facilitators and barriers of the implementation of CHW training

This study also showed that some factors can facilitate and/or constrain the implementation of the training programme. These are synthesised further below:

4.3.2.1 Implications of selection criteria on training

The findings in my study indicate that the selection criteria for CHWs in the WBOT programme were varied and inconsistent. In some instances, the requirement was that one had to be a resident of the community irrespective of whether one possessed the minimum academic standards and experience. It was also noted that one's prior experience as a CHW took priority over a minimum educational background. The minimum high school qualification was also considered while in most instances, and as per the guidance of the current policy (19), the CHWs that were already in the existing pool took preference over other criteria. The draft policy further states that they should be linked to a PHC facility with no educational requirement but must have literacy and numerical skills and have a recognised prior learning process (18) a contradiction from what has been found in this research. Despite the different levels of education and experience, CHWs received the same training, and this introduced variations in the way the CHWs received and synthesised the training content. It further required the trainers to seek innovative ways to ensure that the weaker CHWs still received the knowledge. Despite the current policy framework (19), stipulating a minimum requirement of a Grade 12 (school-leaving certificate), it is evident that this sort of variation in selecting CHWs is common across the country. Schneider et al (13) in their evaluation of the implementation of the WBPHCOT confirm that CHWs have mostly been drawn from an existing pool of CHW in communities. This has raised concern that the wide range of characteristics in education, experience and levels of training and competencies will render a cadre that displays limited uniform standards in skills, literacy levels and capabilities Schneider et al (13), while the policy

framework has equally noted the concerning variation in how CHWs understand the training content (19).

Further studies have demonstrated the varied methods of CHW selection. A study in Kalabo district, Zambia, Stekelenburg (121) showed how several criteria were used in a CHW programme such that most of the respondents appeared to have limited knowledge about the existing criteria. More importantly, the authors further indicate that the failure to follow appropriate selection can result in adverse effects on the CHWs' performance. They state that it can lead to a selection of inappropriate candidates which can lead to their poor performance and therefore a lack of community support and trust (121). Lehmann and Sanders (3) weigh in on this notion. They assert that the lack of formal, clear criteria regarding literacy levels of CHWs, including the disregard to accommodate the existing variation in the training compromises the extent to which the acquired knowledge translates uniformly onto their work. This ultimately has implications for the extent to which they provide similar and adequate services. By these criteria or standards indicated in my study, the recruitment of CHWs is compromised in that the lack of proper standards is likely to include individuals that have limited capabilities and capacities. Moreover, the inconsistencies in the selection criteria should be a concern in the sense that for a workforce entrusted with being the cornerstone of South Africa's healthcare system, at least some levels of requisite standards should be put in place. This is something the DOH in South Africa should consider in the effort to strengthen the training of CHWs, especially in light of the existing historical CHW competency variations.

4.3.2.2 Duration of training

The study's findings highlighted how the duration of the training was perceived to be a constraining factor in the implementation of the training programme. The training was conducted over a short period (ten days) with a lot of content and a large volume of material. There were concerns about whether the CHWs fully developed skills and knowledge and questioned the extent to which the CHWs could adequately absorb the content in such as short space of time Bhutta et al (1) seem to suggest something along with a range, but the jury is out regarding what is the most ideal duration to conduct training. Along with Redick et al (24), they state that training duration varied from several hours to several days to even several

months in many countries. The length of training appears to vary depending on the content provided. If we take, for example in Brazil's CHW programme called Programa Saúde da Familia, their training was a 12-week residential course that included curative, preventive and promotive components, four weeks of fieldwork, and ongoing training sessions (1). In contrast, in Thailand, in their national programme, the Village Health Volunteer Program, CHWs are trained for seven days on the concepts of PHC, disease prevention and basic curative tasks, followed by on-the-job training for three weeks (1). Javanparast et al (7) state that in Iran, the Behvarz student receives two years of residential preservice training. Interestingly Redick et al (24) contradict the findings in my study as they state that shorter training sessions should cover a single intervention or component as opposed to a whole range of components as in my study. This may potentially reveal the weakness in the training in my study and indicates that the content provided within the 10-day duration may need to be reviewed. Concurring with the participants in my study, the literature further suggests that short and insufficient training can take away CHWs confidence and lower community trust and their services' uptake (117, 122). Moreover, Javanparast et al (7) states that the benefits of having training over a long period enable CHWs to fully understand and absorb the content, receive better exposure to the training content, more so when coupled with in-service training where they can apply what they learnt in class into practice. However, on the contrary, it is noted that training over a short period, followed by continuous on the job training, as in my study, can help CHWs retain what they learnt and apply it on the job and improve their knowledge and skills (1, 14). Furthermore, Li et al (63) propose another perspective and mention that even though the assumed benefits of longer and comprehensive training is that it ensures prolonged exposure to the content which can increase skills and competence, it may present cost implications and may not be feasible or practical.

On the other hand, Jaskeiwicz and Tulenko (116) recommend an intermediary approach. They suggest that the training length might need to be provided in intervals to allow more practice on the job. They indicate that this approach should be part of a broader strategy that can include appropriate quality, frequency, the relevance of supportive supervision, periodic retraining and continuous professional development opportunities. This may be an appropriate approach to consider in South Africa's context, given the noted variation in CHWs' backgrounds and literacy levels. Moreover, this approach could respond to the gap that was identified in my

findings regarding the limited in-service or refresher training. Scott et al (117) further noted that giving CHWs refresher or continuous training can improve their performance and competence to do their work with a sense of belonging and ownership of their tasks. While the literature reflects a great diversity of approaches, location, organisation and length of training, there is agreement on one matter: that continuing, or in-service training is as essential as the initial training. Several studies found that where refresher training is not available, acquired skills and knowledge are quickly lost (123).

In support of this, Lehmann and Sanders (3) stated that CHWs need continued training and support to perform their duties effectively. In line with this assertion, Javanparast et al (7) state that in-service training is essential to reinforce initial training and ensure that skills are being practised. The findings in Curtale et al (124) study in Nepal reinforced this argument as it revealed that three days of additional training for CHWs once a year was found to increase the standard of services offered. The findings concur with those in my study. The participants felt that more emphasis on in-service training was an important factor that could improve the effectiveness of the training. They believed that this needs to be investigated to provide CHWs with up-to-date information on treatment and approaches to care. Regardless of the debates on the duration of CHW training programmes, it appears that the South African programme will need to consider a more continuous process with frequent in-service training to reinforce what has been learnt during their sit-in training.

4.3.2.3 Training methods

In this study, the methods used for training proved to be the facilitators of the implementation of the training. The findings indicated that CHWs gained sufficient knowledge through theoretical and participatory sessions such as role-plays and visuals to enhance the understanding of concepts. Furthermore, the findings indicate that CHWs appreciated and benefitted more from the mixed method of training to enhance their understanding of what they were taught and increase their knowledge. The findings in my study echo existing studies regarding the use of mixed approaches to CHW training. Scott et al (117) believe that to improve learning, training is more valuable when offered through a mix of practical experience

and not only through classroom learning with close supervision. Abdel-All et al (125) also state that training methods that allow for interactive learning, such as classroom lectures, interactive lessons, e-learning and online support, and group discussions, or a combination of two or more, are more beneficial to improving the learning of CHWs.

Abrahams-Gessel et al (20) also affirmed the findings of this study in their work which indicated that cardiovascular disease training increased CHWs awareness, and that this knowledge was maintained six months after the training. They indicated that the approach used consisted of lectures with interactive activities and customised to individual sites. Nyalunga et al (14) also mention that several programmes from the literature recommend that in addition to the theory-based or classroom-based training that CHWs receive, training should also occur in the hands-on community experience in the work setting, with continued refresher training. Bhutta et al (1) state that whereas in the past, training approaches were too theoretical and too classroom-based, competency-based approaches are now commonly used. Covert et al (126) state that competency-based education, commonly used in public health, focuses on learning outcomes and prepares health professionals for future practice needs. Aitken (127) further emphasise that in most settings, CHW training should be explicitly competency-based because of their limited formal education. Coinciding with the findings in my study, Redick et al (24) note that some of the best practices in CHW training employ interactive methods. Moreover, it is suggested that in instances where there is didactic training it should be supplemented with plenty of interactive sessions such as small group discussions, role-plays, and field activities. This type of learning is thought to be more effective, especially when the CHWs are illiterate or undereducated (127). Simulations, like role plays, help CHWs deal with real-life situations more adequately (1).

Given the benefits of theory-based participatory classroom training, it will be valuable for DoH to review training approaches used in South Africa to follow evidence-based practices to accommodate CHWs with little or no education. This is likely to prepare them to engage with the curriculum practically and to engage with similar experiences that they will encounter when interacting with individuals in the community.

4.3.2.4 Language of instruction in the training

The findings of this study indicate that language was a barrier in the training as it was delivered in English, a second or third language to most CHWs. The training manuals were written in English and the medium of instruction was in English. This made it difficult for the CHWs to link the manual with the verbal instructions provided. Seeing that English was the primary language used, there was an attempt to use other indigenous languages that the CHWs could understand. The use of any language plays a critical role in retaining knowledge, applying, and understanding content and a host of other factors. The findings in Puoane et al (128) work concur with the findings of this study. Their research indicated that CHWs were eager to be trained in English, but the local language was used to explain some difficult concepts. The authors' further state that English training materials represent a potential stumbling block to practical training. In this regard, they assert that considering that CHWs are trained to convey knowledge and skills gained from training to their communities using a local language, the training should also be given in their local language. Confirming findings of this study, Abdel-All et al (125) in their review state that the language barrier was a challenge in the training of CHWs as the training manual was written in the local language, while the medium of instruction was in English, and this made it difficult for the CHWs to link the manual with the verbal instructions provided.

Abrahams-Gessel et al (20) state that language as a mode of instruction and as the dominant mode of communication in any community is an important component of CHW training. In Guatemala and South Africa, the authors noted that official instruction materials in Spanish and English respectively were consistently supplemented with parallel explanations in the community's dominant languages (Tz'utujil and isiXhosa, respectively). The trainers' intimate knowledge of the communities and their fluency in the dominant spoken languages enabled them to conduct effective role-playing exercises to supplement written scripts consistent with the evidence for training fidelity (20, 129). In line with the findings in this study that training should be offered in the local language(s) so that the CHWs can understand and engage with the content better so that their skills and knowledge are enhanced, Redick et al (24) supplemented this notion by recommending that the training material should be adapted so that it can be understood by the CHWs in their local languages.

4.3.2.5 Cultural sensitivity

Cultural practices play a major role in shaping the health-seeking practices of many communities in South Africa. CHWs in this study were faced with circumstances where mothers followed cultural practices in the care for their babies in ways that conflicted with Western-oriented MCH care as trained. They could not manage and respond to issues related to these cultural beliefs and did not have the competence or confidence to address these dynamics. A study indicated the importance of cultural sensitivity for CHWs working in diverse communities as they need to be trusted, have a shared culture and understand the cultural milieu to have a good patient relationship (130). The authors mention that a good relationship is important for working with individuals, caring for them, and for improved health outcomes to be realised (130). In addition, a study conducted in rural India found that training tailored to the local culture of the CHWs themselves made it easier for them to understand and retain the content (125). In my view, this implies that CHWs training that is sensitive to their own culture is likely to prepare them to manage the cultural norms in their communities.

Even though people cannot always know other people's cultures, it is important that the training and curriculum be culturally sensitive and address a general set of norms and beliefs. Gampa et al (130) state CHWs programs have shown improved health outcomes and relate this to the efficacy of culturally competent training. Through culturally sensitive training, the authors point out that communities' health outcomes have improved due to CHW involvement combined with their community knowledge and cultural familiarity. Nankunda et al (131) in their study conducted in rural Uganda, found that some of the cultural beliefs that posed as obstacles to exclusive breastfeeding were discussed during training. The authors indicated that the trainers discussed ways of correcting the mistaken ideas in these beliefs without antagonising the community. At the end of the training, the peer counsellors conveyed appropriate information using the counselling skills they had acquired. Schaaf et al (132) state that CHWs may be expected to act as a "cultural broker" in situations where program planners attempt to address cultural differences or mistrust. Cultural brokers may communicate health system priorities and information to communities in culturally appropriate and acceptable ways and communicate community needs and concerns to a health system that suffers from cultural inaccessibility (132). Given the findings in this study, a training curriculum/content that is

sensitive to the cultural needs of the communities that CHWs serve needs to be included to arm CHWs with skills and knowledge on how to address cultural issues that they may encounter.

4.4 Limitations of the study

The findings of this study should be read within several limitations. Firstly, the data from the CHWs was conducted through FGDs instead of in-depth interviews, therefore, limiting a wider range of voices and unique CHW experiences. Moreover, as much as the researcher encouraged all the CHWs in the discussions to participate, those that were more vocal, and dominant tended to speak the most. Those less vocal could have provided unique insights regarding their experiences. Secondly, the number of CHWs interviewed was small such that it may not have provided broader and diverse views of CHWs, which may have provided a more inclusive perspective. Thirdly, due to the qualitative nature of the study, the results are not generalisable; however, they provide insights into how training of CHWs could be conceptualized for them to achieve the intended objective, particularly in contexts that are similar to those represented in the study. Fourthly, the scope of the study was confined to one district and two sub-districts in one province in the country. Several districts in Gauteng have had the experience of implementing the WBPHCOT strategy therefore this could have limited opportunities for varied training experiences in other contexts that may have presented relevant lessons. Fifthly, the views on the training were also limited to the CHWs and managers at the district and one representative from the province. Extending the study to high level stakeholders such as national representatives and/or policymakers who have oversight on the expectations and objectives of the CHW policy on training could have added a broader policy perspective to the study findings.

Lastly, some participants had multiple work demands and time constraints such that interviews were often rushed. In addition, regardless of the researcher's reassurance on confidentiality, some participants remained wary of providing unedited and authentic views. Some participants who had been found through recommendations refused to participate in the study, citing fear of being exposed. Despite these limitations, this study unearthed aspects of the implementation

of the training that can inform subsequent revisions of CHW training within South Africa's national CHW programme.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study aimed to understand the CHWs and managers' experiences and perceptions of the WBOT training in the Tshwane district. This chapter presents the conclusions drawn from the findings of this study to make recommendations and highlight the implications for further research.

5.2 Conclusion

A wide body of knowledge acknowledges that CHWs have become an important vehicle to addressing health workforce shortages and contributing to the strengthening of PHC and achieving UHC (3, 117). The findings in this study confirm that this cadre has the potential to achieve these goals. The CHWs in the study proved to be providing services that align to those detailed in the current policies. This is a positive step towards ensuring that the roles of CHWs relate to the identified needs of their respective communities, particularly those that continue to experience barriers to accessing health care. It was evident that the training is making progress in capacitating CHWs to function in their communities, however, there were limitations that require the consideration of those in the position of reviewing the current training programme. The extent to which the current content equips CHWs to address cultural dynamics was deemed a gap that needs to be considered. Much has been mentioned about the mechanisms to recruit and select CHWs and the lack of standardised criteria compromises the extent to which CHWs uniformly engage with the training content. It is therefore important for the CHW programme to have a policy that stipulates the minimum recruitment criteria of CHWs to address the significant disparities in entry-level qualifications. However, consideration of a standardised process is likely to be a complex exercise in light of the historical factors that led to this variation in literacy requirements and selection criteria. In addition, the duration of the training and content overload was questioned – which is a crucial factor to consider if the training is to guarantee that CHWs optimally acquired the content provided.

The study positively highlights that the WBPHCOT training programme has adopted the best practice of employing a mix of training methods - theory, practical and participatory approaches. This is an important approach that needs to be considered for other elements of training as research shows that adult learners can retain knowledge optimally when they consume it in an interactive mode (24).

Even though the training of Outreach Team Leaders (OTLs) was not considered in the study, their competence and ability to provide ongoing training to CHWs is of importance to increase their skills and knowledge to provide effective supervision and for CHWs to be on par with policy changes and new developments.

5.3 Recommendations

In light of the study's insights regarding the experiences of implementation training for CHWs, the following recommendations can be considered in subsequent revisions of the training programme.

- To enable and enhance the knowledge and skills of CHWs, the **format of training** has to be revised. The training has to be offered in segments per session/module, followed by continuous/in-service training on the job and supportive supervision to motivate CHWs. This will ensure continuity in the process to reinforce the knowledge and skills introduced in the formal pre-service training.

- To adequately **accommodate the different literacy levels,** there is a need to review training methods and follow evidence-based practices that will prepare CHWs to engage with the curriculum in practical ways that simulate the experiences they will encounter when interacting with individuals in the community. Secondly, separating groups according to literacy levels to accommodate their individual needs will be beneficial.

- Adequate **resources for training** with structured support to motivate and retain CHWs after training should be to be put in place. Public-private partnerships should be formed to assist in coordinating relevant local resources representing various stakeholders,

sectors, and civil society organisations to address priority health problems in the country.

- **Strong leadership and management** will be of importance in the implementation of the CHWs training programme to be successful. This element will ensure accountability regarding for instance the standardisation of training selection/recruitment criteria so that there is less fragmentation of training implementation, the mobilisation of required resources to support training and coordination of training processes.

- **Selection criteria** and recruitment of CHWs needs to be examined; so that the educational level and competencies of CHWs are a key priority. The selection of the most qualified individuals as CHWs is important to the success of community-based interventions. However, the selection criteria to be used need to be aligned to the broader WBPHCOT Policy Framework and Strategy. Moreover, the considered and/or reviewed the minimum level of education required will need to be reviewed against the tasks to be performed and the training support available.

- **There should be the translation of training material into the local languages of the CHWs** considering the language concerns and literacy levels. Training delivery and the provision of learning materials in the local language can help improve CHWs acquisition of the training content to improve their skills and knowledge.

- The content of training should be aligned to the CHWs' context and environment to ensure that training **addresses the cultural dynamics** that CHWs are confronted with in the communities. This will assist to enhance the trust of communities in CHW services and the health system as CHWs will display a level of respect for local practices and routines.

- In light of the expected increase in **mental health care** needs to be brought about by the emergence of Covid-19, training in this area should be a key in the WBPHCOT programme. Counselling and communication skills of CHWs need to be enhanced for them to be able to manage to handle mental health issues that they will encounter in the community. Better ways should be explored to integrate these roles (in mental health care) within the larger healthcare system in terms of the range of tasks to be performed

under the CHW role, such as referrals, and collaborative relationships with other health workers and practitioners with the mental health care system.

- **Inviting expert facilitators on a particular disease area** to provide expert knowledge is recommended so that both the CHWs and trainers can learn from them and receive in-depth knowledge of the diseases.

5.4 Implications for future research

The improvement of CHW programmes in LMCs remains key to improving health outcomes and reducing health inequalities within various communities. The roles of CHWs to fulfil this goal cannot be strengthened without adequate training and supervision. The findings in this study present a limited scope of the experiences of training. More insight can be obtained through further studies in areas suggested below:

- Expand geographical range for wider insight of CHWs training. Considering other districts and even provinces could explore the extent to which other settings in South Africa have similar experiences and perceptions.

- A wider sample that includes policy makers at the national, other health care workers and the community should be considered in future studies to gain more insights from a policy and user perspective.

- Future research should seek to use a diverse range of methods for data collection. This particularly includes in-depth interviews for CHWs to gain more individual insights and experiences, and observations of the training to support views of CHWs and those who deliver training.

- Future research should seek to explore ways of transforming the gendered notion and norms related to community health care work. This could include exploring CHW training approaches that are gender-sensitive and responsive to the shortage of men in this cadre. Such an endeavour could begin to address the issue of gender equity in the community health worker sector.

- Covid-19 has had an impact on health systems and communities at large including CHWs. This has been particularly in relation the impact on mental health and wellness. CHWs already reportedly play a large role in providing psychosocial support to households and patients. However, future research could seek to gain more insight into training that better prepares and empowers CHWs to support the unique psychosocial needs and mental health issues that are presented by unprecedented epidemics such as Covid-19.

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APPENDICES

Appendix 1: Plagiarism Declaration



PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I _ Lifutso Motsieloa ___ (Student number: __584503_) am a student registered for the degree of _ Master of Public Health __ in the academic year _2021__.

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
- I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature: _____ Date: ____ 20 July 2021__

Appendix 2: Semi-structured Focus Group interview with Community Health Workers

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector …….**

2. **Date of interview ……..**

3. **Interviewer's name ……**

4. Result codes

01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed

05 = Other .....

1. Please, could you tell me about your job as a CHW (or tell me about your working day - your activities as CHWs (job descriptions)?

2. What are the things that you like most about job (**probe:** outreach activities, interaction with families, community etc)?

3. What are some of the challenges that you face in your job?

4. Tell me about the training you received to become a CHW.

5. What are your views on CHW training you received?

Probe:

- Challenges and successes of training.
- Mode of training (such as frequency, the format of training i.e. is it practical or class-room based and whether this has been useful, language of instruction and whether it was a challenge).
- Access to the venue. Did it require that you travel to the venue and to what extent was this convenient?
- How and when are you notified about the training?

6. Which area or part of training has been most useful for you and why?

7. Which part of training has not been useful and why?

8. To what extent does the training enable you to provide the services that are in your job descriptions?

9. Based on your experiences, what recommendations would you make regarding training of CHWs?

10. Do you have any other comments?

Thank you very much for your patience and participation in the discussion.

Appendix 3: Consent for Audio-Recording Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.



Consent for Audio-Recording:

I hereby confirm that I have been informed by the researcher, Lifutso Motsieloa, about the nature, conduct, benefits and risks of the study. I have also received, read and understood the written participant sheet.

I understand that I can decide whether the interview will be audio-recorded and that there will be no prejudicial consequences if I do not want the interview to be recorded. I understand that if the interview is audio-recorded that the tape will be safely stored for five years after the interview has been transcribed.

I understand that I can ask the person facilitating the interview to stop audio-recording and stop participating altogether at any time. I also understand that data will be retained for two years after publication or six years if no publication.

I hereby give my written consent and agree to the interview being audio-recorded [ ]

I do not give consent to the interview being audio-recorded [ ]

Participant

_____	_____	_____
Print Name	Signature	Date

I, Lifutso Motsieloa herewith confirm that the above participant has been fully informed about the nature and conduct of the above study and freely consented to be tape-recorded.

Researcher

_____	_____	_____
Print Name	Signature	Date

Appendix 4: Consent form for Focus Group Discussion

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

I hereby agree to participate in research on Training of Community Health Workers Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop participating at any point should I not want to continue, and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally in the immediate or short term. I also understand the data for the study will be retained for two years after publication or six years if no publication.

I understand that my participation is voluntary, and confidentiality is not guaranteed.

……..
Signature of participant **Date**:……..

I hereby voluntarily consent to participate in the focus group discussion.

……..
Signature of participant **Date**:……..

Appendix 5: Information Sheet for Community Health Workers

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

Introduction and background

Good day. My name is **Lifutso Motsieloa** I am from the School of Public Health at the University of the Witwatersrand. I obtained permission from the Gauteng Department of Health and Tshwane Health to conduct research on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.**

The overall aim of the study is to understand the experiences of training by Community Health Worker's in Ward Based Outreach Teams (WBOT).

Specific Objectives:

- To describe the roles and responsibilities of CHWs,
- To explore CHWs' experience and perceptions of training,
- To explore relevant stakeholders' (Team Leaders, Facility Managers, District Manager, WBOT Coordinators and GP-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

The information for this study will be used to inform and advocate for policy improvements of CHW training in line with the CHW policy framework and PHC reforms in the country.

I recognize and am aware of your role in WBOT and would therefore welcome to hear from you on your perceptions and experiences of the current training of Community Health Workers (CHW) in Ward based Outreach teams. The interview should take no more than 60 minutes of your time. Please note that since you are part of a group, I cannot guarantee that other members of the group will ensure that all the information discussed is kept confidential as this is out of my control, however, I will request that this before the discussion.

Confidentiality

The information that you give in the focus group discussion will be kept confidential. All interviewees will be given a code and these codes will only be known by me as the researcher and will be used only for the purpose of the study. Your names will not be made known in any feedback, transcribed data or research report from the study. All the answers provided by participants will be combined and will be written in a collective form of a research report.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates in it. There will be no negative consequences for individuals who do not want to participate in the discussion. You will not be paid for taking part in the study. During the interview discussion, you have the right not to answer any questions that make you feel uncomfortable, or to stop the interview discussion at any time.

Recording the interview

I would like your permission to record the discussion. This will makes it easier for me to record what you say truthfully. If you do not agree it will not in any way affect the interview discussion, and I will alternatively take notes of what you have said. I am the only person conducting this research who will have access to the recordings. Recordings will be destroyed two years after the publication of the findings as per Ethical Committee requirements.

Consent

I am required by the Ethics Committee to ask you to sign a written consent form that you have read this information sheet and agree to participate in this study, and a separate consent form for recording the interview.

Contact details

The University of the Witwatersrand Research Ethics Committee has approved this research. You may contact this office if you have questions about your rights as a participant, or questions or concerns about any aspect of this study can be directed to Ms Anisa Keshav on (011) 717 1234. If you have further questions or concerns about the research, you may also contact me or my supervisor later. Our contact details are as follows:

Ms Lifutso Motsieloa (Student)
School of Public Health
University of the Witwatersrand, Johannesburg
Cellular Number: 078 1400 075
Email: Lifutso@gmail.com

Dr Nonhlanhla Nxumalo (Supervisor)
Centre for Health Policy
School of Public Health
University of the Witwatersrand, Johannesburg
Phone: +27 11-717 3234
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Appendix 6: semi-structured interview guide with key informants (Team Leaders)

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector ……**
2. **Date of interview ……..**
3. **Interviewer's name ……**

4. Result codes
01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed
05 = Other .....

1. Please, could you tell me about your job or role as a WBOT Team leader (or tell me about your working day – and your activities).

2. What are the things that you like most about your job (**probe** outreach activities, interaction with WBOT coordinators, CHWs, families, community etc)?

3. What are some of the challenges that you face in your job?

4. Do you require particular skills to be a WBOT Team Leader and what would those skills be?

5. What kind of training did you undergo given the skills you have?

Probe:
- Tell me about the training you received to become a WBOT Team leader.
- Which area or part of training has been most useful for you and why?
- Which part of training has not been as useful for you and why?
- To what extent does the training enable you to conduct the task as per your job description?

6. Please could you tell me about the work of CHWs (or tell me about their roles and responsibilities)?

7. Based on what you have told me about CHWs work, as a Team Leader, what is your role in working with them?

Probe: How do you support them in the work that they do?

8. CHWs that you work with, where do they come from?

Probe: Are they employed by government or from NGOs?
- What kind of qualifications do they have?
- What qualifications are they expected to have?
- Which institutions are involved in the training and where are they located

9. What are your views on the training currently offered to CHWs if any?

Probe:
Challenges:
- To what extent is Language an issue in terms of levels of literacy for CHWs? e.g. the language of instruction and whether that has been a problem
- Are resources provided; such as transport to get to the training venue, books/guidelines
- How and when are they notified when there is training?
- Successes that you have experienced in the training

10. Please give your view on the extent to which the training prepared and armed CHW with knowledge and skills to address the issues they are confronted with where they provide services.

Probe: To what extent do you think the training enables the CHWs to fulfil the roles and responsibilities as stipulated in their job descriptions?

11. Which areas in your knowledge or in your view are CHWs skills and knowledge most notably strong? Which areas of their work is enabled by the training?

Why do think that?

12. Which areas are the skills and knowledge of CHWs limited and explain why you think that is the case

Probe: Which skills and knowledge do you think they need to improve or they struggle with?

13. What kind of challenges and successes have you experienced working CHWs if any?

14. From your experience of observing and involvement in the implementation of the training, you may have some lessons to share. What recommendations would you make regarding training of CHWs in South Africa?

15. Do you have any other comments?

16. Are there any relevant documents that you could provide or advise me on that could be more informative about training of CHWs in WBOTs?

Thank you very much for your patience and participation in the discussion.

Appendix 7: Semi-structured interview with Ward Based Outreach Teams (WBOT) Coordinators

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector …….**

2. **Date of interview ……..**

3. **Interviewer's name ……**

4. Result codes
01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed
05 = Other .....

1. Please, could you tell me about your job or role as a WBOT Coordinator (or tell me about your working day – and your activities)

2. What are the things that you like most about your job (**probe** outreach activities, interaction with Team Leaders, CHWs, families, community etc)?

3. What are some of the challenges that you face in your job?

4. Do you require particular skills to be a WBOT Coordinator and what would those skills be?

5. What kind of training did you undergo given the skills you have?

Probe:
- Tell me about the training you received to become a WBOT Coordinator.
- Which area or part of training has been most useful for you and why?
- Which part of training has not been as useful for you and why?
- To what extent does the training enable you to conduct the task as per your job description?

6. CHWs that you work with, where do they come from?

Probe: Are they employed by government or from NGOs?

- What kind of qualifications do they have?
- What qualifications are they expected to have?
- Which institutions are involved in the training and where are they located?

7. What guides the training provided to CHWs?

Probe: Guidelines or policies with regards to training provided to CHWs?

8. What are your views on the training the CHWs have received?

Probe:
- Challenges experienced by the CHWs (around issues such as language of instruction; issues of literacy, resources such as transport to get to the venue; books/guides)
- How and when are CHWs notified about the training?

9. In your view, to what extent do you think the training enables the CHWs to do their work in terms of roles and responsibilities (according to the policy).

Probe: What areas of work do you think CHWs struggle the most with and which are they good at doing?

10. Which area or part of training do you think has been most useful for the CHWs and why?

11. Which part of training has not been useful for the CHWs and why?

12. From your experience of observing and involvement in the implementation of the training, you may have some lessons to share. What recommendations would you make regarding training of CHW based on your experience?

13. Do you have any other comments?

Thank you very much for your patience and participation in the discussion.

Appendix 8: Semi-structured Interview Guide with key informants (District Manager)

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector ……**
2. **Date of interview ……..**
3. **Interviewer's name ……**

4. Result codes
01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed
05 = Other .....

1. Please tell me about the work of CHWs (or tell me about their roles and responsibilities).

2. Based on what you have told me about CHWs work, as a District Manager, what is your role/function in the CHWs programme?

3. CHWs that you work in the District, where are they sourced from?

Probe:
- Are they employed by government or by NGOs?
- What qualifications are they expected to have?
- Which institutions are involved in their training, and where are they based?

4. What are your views on the training currently offered to CHWs if any?

Probe:
- Challenges that you may know of regarding the implementation of training.
- Some of the successes you may know of regarding the implementation of training.

5. What guides the training provided to CHWs?

Probe: Guidelines or policies.

6. Please give your view on the extent to which you think training prepares and arm CHW with knowledge and skills to address the issues they are confronted with where they provide services.

Probe: To what extent do you think the training enables the CHWs to fulfil the roles and responsibilities as stipulated in their job descriptions?

7. In your conversations or interactions with Managers that are involved in the implementation of WBOT, what do you think the CHWs are strongest at in terms of skills and knowledge?

Probe:

- Which areas of their work are enabled by the training?
- Which areas of training needs to be improved that will enable CHWs to perform well in their jobs?

8. In your interactions and conversations with other Managers involved in WBOT implementation, which areas of CHWs skills and knowledge do you think they are limited in and explain why you it is the case.

Probe: Which skills and knowledge do you think they need to improve, or they struggle with?

- What is it that CHWs need to improve in terms of their skills and knowledge in order to perform well in their jobs?

9. In light of your experience of observing some of the implementation of the training of CHWs, what recommendations would you make regarding training of CHWs in South Africa?

10. Do you have any other comments?

11. Are there any relevant documents that you could provide or advise me on that could be more informative about training of CHWs in WBOTs?

Thank you very much for your patience and participation in the discussion.

Appendix 9: Semi-structured Interview Guide with key informants (NGO Representative)

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector ……**
2. **Date of interview ……..**
3. **Interviewer's name ……**

4. Result codes
01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed
05 = Other .....

1. Please, could you tell me about your role as a representative of an NGO?

2. What kind of services does your NGO provide?

3. Can you please describe the roles and responsibilities of CHWs?

4. Based on what you have told me about CHWs work, what is your role in working with them?

Probe: How do you support them in the work that they do?

5. What are your views on the training currently offered to CHWs if any?

Probe:
Challenges:

- So let's talk about: resources provided; such as transport to get to the training venue, books/guidelines
- How and when are they notified when there is training?
- And what successes to your knowledge have been experienced through the training?

6. What guides do you receive and/or use to guide the work you are doing with CHWs?

Probe: Guidelines, policies or any curriculum you are using or following.

7. Please give your view on the extent to which the training prepared and armed CHWs with knowledge and skills to address the issues they are confronted with where they provide services.

Probe: To what extent do you think the training enables the CHWs to fulfil the roles and responsibilities as stipulated in their job descriptions?

8. Which areas in your knowledge or in your view are CHWs skills and knowledge most notably strong? Which areas of their work is enabled by the training?

Why do think that?

9. Which areas are the skills and knowledge of CHWs limited and explain why you think that is the case.

Probe: Which skills and knowledge do you think they need to improve or they struggle with?

10. In your view, what are your strengths and limitations in the implementation of CHWs programme?

11. With regard to your strengths, what value have they added to your programme?

12. What have been the successes and challenges of working with CHWs?

13. From your experience of observing the implementation of the training, you may have some lessons to share. What recommendations would you make regarding training of CHWs in South Africa?

14. Do you have any other comments?

15. Are there any relevant documents that you could provide or advise me on that could be more informative about training of CHWs in WBOTs?

Thank you very much for your patience and participation in the discussion.

Appendix 10: Semi-structured Interview Guide with key informants (Department of Health representative)

Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

1. **Location & Sector ……**
2. **Date of interview ……..**
3. **Interviewer's name ……**

4. Result codes
01 = Completed , 02 = Respondent not available, 03 = Respondent refused; 04 = Partially completed
05 = Other .....

1. As a representative of Department of Health in the Province, can you please describe your overall role and your role with regards to the WBOT programme and the CHWs.

2. Please describe to me the work that CHWs do focusing on roles and responsibilities (or tell me about their activities or job descriptions)?

It is noted that the CHWs have been going through a series of training in the last 2 years. In your experience, what are your views on the training currently offered to CHWs?
Probe:
- Overall challenges regarding implementation of training.
- Successes experienced in implementation.

3. Can you also describe any challenges that are faced by the department/you with regard to the implementation of CHWs training?

4. With regards to some work that the department does with NGOs, can you describe the nature of the interaction of collaboration in terms of training, if any?

5. Please give your views on the extent to which the training prepared and armed CHW with knowledge and skills to address the issues they are confronted with where they provide services.

Probe: To what extent do you think the training enables the CHWs to fulfil the roles and responsibilities as stipulated in their job descriptions?

6. In your interactions and engagements with the key managers involved in WBOT implementation, what do you think the CHWs are strongest at in terms of skills and knowledge? Which areas of their work is enabled by the training?

Probe: Why do think that?

7. In your interactions and conversations with key managers involved in WBOT implementation, which areas of CHWs skills and knowledge do you think they are limited in and explain why is the case.

Probe: Which skills and knowledge do you think they need to improve, or they struggle with?

8. Is there a system to review or monitor the training in the Province, for instance look at the extent of training; the number of CHWs that have been trained, etc.

Probe: Any guidelines followed or curriculum.

9. In light of your experience of observing and overseeing some of the implementation of the training of CHWs, what recommendations would you make regarding training of CHWs in South Africa?

10. Do you have any other comments?

11. Are there any relevant documents that you could provide or advise me on that could be more informative about training of CHWs in WBOTs?

Thank you very much for your patience and participation in the discussion.

Appendix 11: Consent form for key informant interview



CONSENT FORM FOR KEY INFORMANT INTERVIEW

I hereby agree to participate in research on Training of Community Health Workers Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop participating at any point should I not want to continue, and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally in the immediate or short term. I also understand the data for the study will be retained for two years after publication or six years in no publication.

I understand that my participation will remain confidential.

……..
Signature of participant **Date**:……..

I hereby voluntarily consent to be interviewed.

……..
Signature of participant **Date**:……..

Appendix 12: Information Sheet for WBOT Coordinators

Introduction and background

Good day. My name is **Lifutso Motsieloa** I am from the School of Public Health at the University of the Witwatersrand. I obtained permission from the Gauteng Department of Health and Tshwane Health to conduct research on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.**

The overall aim of the study is to understand the experiences of training by Community Health Worker's in Ward Based Outreach Teams (WBOT).

Specific Objectives:

- To describe the roles and responsibilities of CHWs,
- To explore CHWs' experience and perceptions of training,
- To explore relevant stakeholders' (Team Leaders, Facility Managers, District Manager, WBOT Coordinators and GP-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

The information for this study will be used to inform and advocate for policy improvements of CHW training in line with the CHW policy framework and PHC reforms in the country.

I recognize and am aware of your role in WBOT and would therefore welcome to hear from you on your perceptions and experiences of the current training of Community Health Workers (CHW) in Ward based Outreach teams. The interview should take no more than 60 minutes of your time. Please note that since you are part of a group, I cannot guarantee that other members of the group will ensure that all the information discussed is kept confidential as this is out of my control, however, I will request that this before the discussion.

Confidentiality

The information that you give in the focus group discussion will be kept confidential. All interviewees will be given a code and these codes will only be known by me as the researcher and will be used only for the purpose of the study. Your names will not be made known in any feedback, transcribed data or research report from the study. All the answers provided by participants will be combined and will be written in a collective form of a research report.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates in it. There will be no negative consequences for individuals who do

not want to participate in the discussion. You will not be paid for taking part in the study. During the interview discussion, you have the right not to answer any questions that make you feel uncomfortable, or to stop the interview discussion at any time.

Recording the interview

I would like your permission to record the discussion. This will makes it easier for me to record what you say truthfully. If you do not agree it will not in any way affect the interview discussion, and I will alternatively take notes of what you have said. I am the only person conducting this research who will have access to the recordings. Recordings will be destroyed two years after the publication of the findings as per Ethical Committee requirements.

Consent

I am required by the Ethics Committee to ask you to sign a written consent form that you have read this information sheet and agree to participate in this study, and a separate consent form for recording the interview.

Contact details

The University of the Witwatersrand Research Ethics Committee has approved this research. You may contact this office if you have questions about your rights as a participant, or questions or concerns about any aspect of this study can be directed to Ms Anisa Keshav on (011) 717 1234. If you have further questions or concerns about the research, you may also contact me or my supervisor later. Our contact details are as follows:

Ms Lifutso Motsieloa (Student)
School of Public Health
University of the Witwatersrand, Johannesburg
Cellular Number: 078 1400 075
Email: Lifutso@gmail.com

Dr Nonhlanhla Nxumalo (Supervisor)
Centre for Health Policy
School of Public Health
University of the Witwatersrand, Johannesburg
Phone: +27 11-717 3234
Email: nonhlanhla.nxumalo@wits.ac.za

Appendix 13: Information Sheet for District Manager

Introduction and background

Good day. My name is **Lifutso Motsieloa** I am from the School of Public Health at the University of the Witwatersrand. I obtained permission from the Gauteng Department of Health and Tshwane Health to conduct research on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.**

The overall aim of the study is to understand the experiences of training by Community Health Worker's in Ward Based Outreach Teams (WBOT).

Specific Objectives:

- To describe the roles and responsibilities of CHWs,
- To explore CHWs' experience and perceptions of training,
- To explore relevant stakeholders' (Team Leaders, Facility Managers, District Manager, WBOT Coordinators and GP-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

The information for this study will be used to inform and advocate for policy improvements of CHW training in line with the CHW policy framework and PHC reforms in the country.

I recognize and am aware of your role in WBOT and would therefore welcome to hear from you on your perceptions and experiences of the current training of Community Health Workers (CHW) in Ward based Outreach teams. The interview should take no more than 60 minutes of your time. Please note that since you are part of a group, I cannot guarantee that other members of the group will ensure that all the information discussed is kept confidential as this is out of my control, however, I will request that this before the discussion.

Confidentiality

The information that you give in the focus group discussion will be kept confidential. All interviewees will be given a code and these codes will only be known by me as the researcher and will be used only for the purpose of the study. Your names will not be made known in any feedback, transcribed data or research report from the study. All the answers provided by participants will be combined and will be written in a collective form of a research report.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates in it. There will be no negative consequences for individuals who do not want to participate in the discussion. You will not be paid for taking part in the study. During the interview discussion, you have the right not to answer any questions that make you feel uncomfortable, or to stop the interview discussion at any time.

Recording the interview

I would like your permission to record the discussion. This will makes it easier for me to record what you say truthfully. If you do not agree it will not in any way affect the interview discussion, and I will alternatively take notes of what you have said. I am the only person conducting this research who will have access to the recordings. Recordings will be destroyed two years after the publication of the findings as per Ethical Committee requirements.

Consent

I am required by the Ethics Committee to ask you to sign a written consent form that you have read this information sheet and agree to participate in this study, and a separate consent form for recording the interview.

Contact details

The University of the Witwatersrand Research Ethics Committee has approved this research. You may contact this office if you have questions about your rights as a participant, or questions or concerns about any aspect of this study can be directed to Ms Anisa Keshav on (011) 717 1234. If you have further questions or concerns about the research, you may also contact me or my supervisor later. Our contact details are as follows:

Ms Lifutso Motsieloa (Student)
School of Public Health
University of the Witwatersrand, Johannesburg
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Dr Nonhlanhla Nxumalo (Supervisor)
Centre for Health Policy
School of Public Health
University of the Witwatersrand, Johannesburg
Phone: +27 11-717 3234
Email: nonhlanhla.nxumalo@wits.ac.za

Appendix 14: Information Sheet for DoH Representative

Introduction and background

Good day. My name is **Lifutso Motsieloa** I am from the School of Public Health at the University of the Witwatersrand. I obtained permission from the Gauteng Department of Health and Tshwane Health to conduct research on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.**

The overall aim of the study is to understand the experiences of training by Community Health Worker's in Ward Based Outreach Teams (WBOT).

Specific Objectives:

- To describe the roles and responsibilities of CHWs,
- To explore CHWs' experience and perceptions of training,
- To explore relevant stakeholders' (Team Leaders, Facility Managers, District Manager, WBOT Coordinators and GP-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

The information for this study will be used to inform and advocate for policy improvements of CHW training in line with the CHW policy framework and PHC reforms in the country.

I recognize and am aware of your role in WBOT and would therefore welcome to hear from you on your perceptions and experiences of the current training of Community Health Workers (CHW) in Ward based Outreach teams. The interview should take no more than 60 minutes of your time. Please note that since you are part of a group, I cannot guarantee that other members of the group will ensure that all the information discussed is kept confidential as this is out of my control, however, I will request that this before the discussion.

Confidentiality

The information that you give in the focus group discussion will be kept confidential. All interviewees will be given a code and these codes will only be known by me as the researcher and will be used only for the purpose of the study. Your names will not be made known in any feedback, transcribed data or research report from the study. All the answers provided by participants will be combined and will be written in a collective form of a research report.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates in it. There will be no negative consequences for individuals who do not want to participate in the discussion. You will not be paid for taking part in the study. During the interview discussion, you have the right not to answer any questions that make you feel uncomfortable, or to stop the interview discussion at any time.

Recording the interview

I would like your permission to record the discussion. This will makes it easier for me to record what you say truthfully. If you do not agree it will not in any way affect the interview discussion, and I will alternatively take notes of what you have said. I am the only person conducting this research who will have access to the recordings. Recordings will be destroyed two years after the publication of the findings as per Ethical Committee requirements.

Consent

I am required by the Ethics Committee to ask you to sign a written consent form that you have read this information sheet and agree to participate in this study, and a separate consent form for recording the interview.

Contact details

The University of the Witwatersrand Research Ethics Committee has approved this research. You may contact this office if you have questions about your rights as a participant, or questions or concerns about any aspect of this study can be directed to Ms Anisa Keshav on (011) 717 1234. If you have further questions or concerns about the research, you may also contact me or my supervisor later. Our contact details are as follows:

Ms Lifutso Motsieloa (Student)
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University of the Witwatersrand, Johannesburg
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University of the Witwatersrand, Johannesburg
Phone: +27 11-717 3234
Email: nonhlanhla.nxumalo@wits.ac.za

Appendix 15: Information Sheet for Team Leaders

Information Sheet for Team Leaders.

Introduction and background

Good day. My name is **Lifutso Motsieloa** I am from the School of Public Health at the University of the Witwatersrand. I obtained permission from the Gauteng Department of Health and Tshwane Health to conduct research on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.**

The overall aim of the study is to understand the experiences of training by Community Health Worker's in Ward Based Outreach Teams (WBOT).

Specific Objectives:

- To describe the roles and responsibilities of CHWs,
- To explore CHWs' experience and perceptions of training,
- To explore relevant stakeholders' (Team Leaders, Facility Managers, District Manager, WBOT Coordinators and GP-DoH representative) experiences and perceptions of the training received by CHWs and the extent to which it equips them to conduct their work.

The information for this study will be used to inform and advocate for policy improvements of CHW training in line with the CHW policy framework and PHC reforms in the country.

I recognize and am aware of your role in WBOT and would therefore welcome to hear from you on your perceptions and experiences of the current training of Community Health Workers (CHW) in Ward based Outreach teams. The interview should take no more than 60 minutes of your time. Please note that since you are part of a group, I cannot guarantee that other members of the group will ensure that all the information discussed is kept confidential as this is out of my control, however, I will request that this before the discussion.

Confidentiality

The information that you give in the focus group discussion will be kept confidential. All interviewees will be given a code and these codes will only be known by me as the researcher and will be used only for the purpose of the study. Your names will not be made known in any

feedback, transcribed data or research report from the study. All the answers provided by participants will be combined and will be written in a collective form of a research report.

Benefits and risks of participation

Please note that participation in this study is voluntary and there will be no direct benefits to anyone who participates in it. There will be no negative consequences for individuals who do not want to participate in the discussion. You will not be paid for taking part in the study. During the interview discussion, you have the right not to answer any questions that make you feel uncomfortable, or to stop the interview discussion at any time.

Recording the interview

I would like your permission to record the discussion. This will makes it easier for me to record what you say truthfully. If you do not agree it will not in any way affect the interview discussion, and I will alternatively take notes of what you have said. I am the only person conducting this research who will have access to the recordings. Recordings will be destroyed two years after the publication of the findings as per Ethical Committee requirements.

Consent

I am required by the Ethics Committee to ask you to sign a written consent form that you have read this information sheet and agree to participate in this study, and a separate consent form for recording the interview.

Contact details

The University of the Witwatersrand Research Ethics Committee has approved this research. You may contact this office if you have questions about your rights as a participant, or questions or concerns about any aspect of this study can be directed to Ms Anisa Keshav on (011) 717 1234. If you have further questions or concerns about the research, you may also contact me or my supervisor later. Our contact details are as follows:

Ms Lifutso Motsieloa (Student)
School of Public Health
University of the Witwatersrand, Johannesburg
Cellular Number: 078 1400 075
Email: Lifutso@gmail.com

Dr Nonhlanhla Nxumalo (Supervisor)
Centre for Health Policy
School of Public Health
University of the Witwatersrand, Johannesburg
Phone: +27 11-717 3234
Email: nonhlanhla.nxumalo@wits.ac.za

Appendix 16: Ethics Clearance (University of the Witwatersrand)

R14/49 Ms Lifutso Motsieloa

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M160856

NAME: (Principal Investigator)	Ms Lifutso Motsieloa
DEPARTMENT:	School of Public Health K.T Motubatse Clinic and Laudium Community Health Centre
PROJECT TITLE:	Training of Community Health Workers in Ward-Based Outreach Teams: Exploring Experiences and Perceptions in Tshwane District
DATE CONSIDERED:	26/08/2016
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr Nonhlanhla Nxumalo
APPROVED BY:	Professor P Cleaton-Jones, Chairperson, HREC (Medical)
DATE OF APPROVAL:	25/01/2017

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary in Room 301, Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in August and will therefore be due in the month of August each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix 17: Ethics Clearance (Tshwane Research Committee)

Kuyasheshwa! Gauteng Working Better
GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

427 Hilda Street, 4th floor, The Fields Building, Hatfield Pretoria 0001 South Africa. Tel: +27 12 451 9036
Enquiries: Dr. Lufuno Razwiedani
e-mail: lufuno.razwiedani@gauteng.gov.za

TSHWANE RESEARCH COMMITTEE

CLEARANCE CERTIFICATE

Meeting: N/A

PROJECT NUMBER: 18/2017

Title: Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.

Researcher: Ms Lifutso Motsiela

Supervisor: Dr Nonhlahla Nxumalo

Facility/Hospital:

- Nellmaphius
- K.T Motubatse
- Ladium CHC

DECISION OF THE COMMITTEE
Approved

NB: THIS OFFICE REQUESTED A FULL REPORT ON THE OUTCOME OF THE RESEARCH DONE

Date: 06 March 2017

.....
Dr. Lufuno Razwiedani
Chairperson: Tshwane Research Committee
Tshwane Health District

.....
Mr. Pitsi Mothomone
Chief Director: Tshwane District Health
Tshwane District

NOTE: Resubmission of the protocol by researcher(s) is required if there is departure from the protocol procedures as approved by the committee.

Appendix 18: Approval letter for clinics

Annexure 1: Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to Ms. Lifutse Motsiela (name of researcher) to do his or her

research on Training of CHW's in NWDT: Exploring Experiences & Perceptions. (research topic) in

K.T. Motubatse (name of clinic) or

_____ (name of CHC) or

_____ (name of hospital).

I know that the final approval will be from the Tshwane Research Ethics Committee and that this is only to indicate that the clinic/hospital is willing to assist.

Other comments or conditions prescribed by the clinic or CHC manager or hospital CEO:

Signature
Clinic Manager/~~CHC Manager/CEO~~
13/12/2016

Appendix 19: Declaration of Intent from Clinic Manager or hospital Chief Executive Officer

Annexure 1: Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to Lifutso Motsiloa (name of researcher) to do his or her

research on Training of Community Health Workers in Ward (research topic) in based Outreach teams: Exploring experiences and perceptions in Tshwane District

_____ (name of clinic) or

Laudium Community Health Centre (name of CHC) or

_____ (name of hospital).

I know that the final approval will be from the Tshwane Research Ethics Committee and that this is only to indicate that the clinic/hospital is willing to assist.

Other comments or conditions prescribed by the clinic or CHC manager or hospital CEO:

N/A

09/12/2016

Signature
Clinic Manager/CHC Manager/CEO

Appendix 20: Declaration of Intent from the Chief Director

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Annexure 1: Declaration of intent from the Chief Director

I give preliminary permission to **Lifutso Motsieloa** (name of researcher) to interview District Manager on **Training of Community Health Workers in Ward based Outreach teams: Exploring experiences and perceptions in Tshwane District.** (Research topic)

I know that the final approval will be from the Tshwane Research Ethics Committee and that this is only to indicate that the district is willing to assist.

Other comments or conditions prescribed by the clinic or CHC manager or hospital CEO:

Signature

Mr M Pitsi
Chief Director: Tshwane District Health
Date: 2017.03.03