

Exploring the Gauteng comprehensive HIV and AIDS care, management and treatment training programme

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DECLARATION

I, Nkhesane Agnes Suping, declare that this report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Management (in the field of Public and Development Management) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

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June 2013

DEDICATION

I dedicate this research report to my husband, children and family members who encouraged me to continue to complete my studies especially when I did not feel the need to go on. Most of all, I thank Almighty God, who is the Lord and Saviour of my life.

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Abstract

In 2003/2004, the provinces of South Africa developed a Comprehensive HIV and AIDS Care, Management and Treatment (CCMT) training curriculum to provide healthcare professionals with specialised knowledge and skills to deliver comprehensive HIV and AIDS care, management and treatment services for persons infected with HIV and AIDS. The initiative was in response to the decision to introduce Antiretroviral Therapy (ART). The report was presented to Cabinet by the Joint Health and Treasury Task Team (JHTTT) on the 8th August 2003.

The purpose of this research study was to explore the learning experiences and challenges encountered by healthcare professionals trained on the Gauteng Department of Health(GDoH) CCMT training programme during transfer of learning to workplaces between 2004 and 2010. The research methodology used was a qualitative research approach and the research design was a basic interpretive research study. The research participants consisted of six doctors and six professional nurses employed in the Gauteng province. The main findings are that healthcare professionals trained in the GDoH CCMT training programme felt that the programme provided them with the knowledge and skills to render the ART services. In addition, most of the participants valued and preferred the multidisciplinary group to be taught in the same class. The majority of doctors felt that they required more of a clinical focus training approach to effectively apply their learning from the CCMT training programme.

LIST OF ABBREVIATIONS

ACHAP	African Comprehensive HIV/AIDS Partnership
AIDS	Auto Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
BHP	Botswana – Harvard AIDS INSTITUTE Partnership for HIV Research and Education
BMOH	Botswana Ministry of Health
CCMT	Comprehensive HIV and AIDS Care, Management and Treatment
CDC	Centres for Disease Control and Prevention
CEUs	Continuing Education Units
CMA	Civil Military Alliance
CPD	Continuing Professional Development
FBO	Faith Based Organisations
FPD	Foundation for professional Development
GALEN	Global AIDS Learning & Evaluation Network
GDoH	Gauteng Department of Health
GHI	Global Health Initiatives
HAART	Highly Active Antiretroviral Therapy
HAI	Harvard AIDS Institute
HIV	Human-Immuno Virus

HPCSA	Health Professional Council of South Africa
HRD	Human Resource Development
IDI	Infectious Diseases Institute
KITSO	Knowledge, Innovation & Training Shall Overcome AIDS
MDGs	Millennium Development Goals
NIMART	Nurse Managed ART
NACOSA	National AIDS Co-ordinating Committee of South Africa
NDoH	National Department of Health
NGOs	Non- Governmental Organisations
NSP	National Strategic Plan for HIV/AIDS & STDs for South Africa 2000-2005
PEPFAR	Presidential Emergency Plan for AIDS Relief
PMTCT	Prevention from Mother to Child Transmission
PWAs	People living with HIV Infection and AIDS
RCW	Revised Code of Washington
SA	South Africa
STDs	Sexual Transmitted Diseases
TNA	Training Needs Assessment
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
WHO	World Health Organisation
WITS	University of the Witwatersrand

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CHAPTER 1: INTRODUCTION TO THE COMPREHENSIVE HIV AND AIDS CARE, MANAGEMENT AND TREATMENT TRAINING PROGRAMME

1.1 Introduction

The HIV and AIDS epidemic has claimed millions of lives, inflicted pain and grief, causing fear and uncertainty, and threatened economies around the world. According to the statistics by the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organisation (WHO), 33.4 million people were estimated to have been living with HIV by the end of 1998 which was a 100% increase compared to 1997 (Tshabalala-Msimang, 2000). It was assumed that if no cure was found more than 40 million people in the world were going to be living with HIV by 2000. Life expectancy has been significantly reduced as many people between 15–49 year age group died of AIDS. In South Africa, the HIV infection rate increased between 1995 and 2000 despite efforts made to reduce the epidemic. Consequently, the Minister of Health called for a renewed commitment from all South Africans to form partnerships to embark on strategies to address the HIV and AIDS epidemic (Tshabalala-Msimang, 2000).

In 2000, HIV and AIDS was reported as number one cause of death identified from the top twenty underlying causes of death accounting for 132 990 (25.5%) deaths (South African Medical Research Council, 2000). According to the results of this study, it was evident that the government had to come up with new strategies to curb the challenge of the HIV and AIDS epidemic facing SA. Therefore, training and development of healthcare professionals was seen as one of the strategies to combat HIV and AIDS.

In this study, the focus was to explore the Comprehensive HIV and AIDS Care, Management and Treatment (CCMT) training programme that was used to train healthcare professionals in the Gauteng Department of Health (GDoH). This training programme was developed in order to comply with the HIV and AIDS, STD Strategic Plan for South Africa (NSP) 2000–2005 and the Comprehensive HIV and AIDS Care, Management and Treatment Operational Plan (2003).

1.1.2 Legislative and Policy Framework for the CCMT Programme

The government of South Africa developed various strategic plans to address the HIV and AIDS challenges. In 1992 the National AIDS Co-ordinating Committee of South Africa (NACOSA) was launched and was mandated to develop a national strategy on HIV and AIDS. The Cabinet endorsed the HIV and AIDS strategy in 1994 and it was reviewed in 1997 against the set goals which were: (i) to prevent HIV transmission, (ii) to reduce the personal and social impact of HIV infection and (iii) to mobilise and unify provincial, international and local resources. The review revealed strengths and constraints in the implementation of the national HIV and AIDS 1994 strategy (Tshabalala-Msimang, 2000). Following the review, the government decided to come up with another HIV and AIDS strategy that could be seen to be capable of addressing the identified constraints.

In July 1999, the former late Minister of Health Dr. Manto Tshabalala-Msimang initiated the HIV and AIDS, STD strategic plan for South Africa which was launched in 2000. This was in response to the former President Mr. Thabo Mbeki's challenge to all sectors of society to become actively involved in the initiatives designed to address the HIV and AIDS epidemic. The HIV and AIDS strategic plan focused on four priority areas namely: prevention, treatment care and support, legal and human rights, and monitoring research and evaluation (Tshabalala-Msimang, 2000).

In April 2002, the Cabinet reviewed the government approach to HIV and AIDS due to the commitment to the National HIV and AIDS, STD and TB Strategic Plan 2000-2005. The progress and impact in the implementation of the plan was noted, however Cabinet decided on a number of measures to support the implementation of the plan. The removal of the systemic constraints on access to the antiretroviral treatment (ART) was one of the identified measures (Comprehensive HIV and AIDS Care Management Treatment Plan for SA, 2003).

In July 2002, the Cabinet set up a Joint Health and Treasury Task Team (JHTTT) to investigate the feasibility and implications of introducing Antiretroviral Therapy (ART) as a component of the national response to the HIV and AIDS epidemic. The focus

of the Task Team was on the second priority area of the National Strategic Plan (NSP) which is treatment care and support (Comprehensive HIV and AIDS Care Management Treatment Plan for SA, 2003).

On the 8th August 2003, the National Task Team presented a report to National Cabinet responsible for the implementation of the NSP with options aimed at supporting the strengthening of the second priority, namely treatment care and support of the national HIV and AIDS strategic plan.

“The options included scaling up current policy interventions, integrating additional interventions, including the option of introducing antiretroviral therapy for people with AIDS” (CCMT Plan SA, 2003: 13).

Cabinet, thereafter, requested the National Department of Health (NDoH) to compile an Operational Plan on the Antiretroviral Treatment Programme (ART) by September 2003.

The National Department of Health (NDoH) requested provinces to compile their own provincial operational plans including plans for human resources and the establishment of the training centre/s. The provincial operational plans were the vehicle for the implementation of the National Operational Plan for the Antiretroviral Treatment Programme (ART). The approach was to help to ensure the delivery of high quality treatment and care. The operational plans were based on the district health systems within each province.

The development of staffing norms and standards for the delivery of the ART and an assessment of human resource needs including health systems managers, clinicians (doctors), nurses (professional nurses), pharmacists, nutritionists (dieticians) and counsellors (social workers) was key for the success implementation of the ART programme (Comprehensive HIV and AIDS Care Management Treatment Plan for SA, 2003).

The healthcare professionals indicated above were identified as the multidisciplinary health team suitable for rendering the ART programme with effect from the 1st June 2004. The provinces were to develop a comprehensive and concise training curriculum to provide all current healthcare professionals with the specialised

knowledge and skills to provide the comprehensive HIV and AIDS care, management and treatment services for persons infected with HIV and AIDS. Training was to be delivered by experts in HIV and AIDS care and treatment in collaboration with local and international partners (Comprehensive HIV and AIDS Care Management Treatment Plan for SA, 2003).

1.2 Background

In order to implement the ART programme, the GDoH decided to engage accredited training providers, namely the Foundation for Professional Development (FPD) and the Wits–Consortium (Reproductive Health Research Unit for HIV and AIDS, Wits Paediatric Unit and Perinatal Health Research Unit) to develop a CCMT training programme in 2003/2004 financial year. The training programme was developed using the training specifications stipulated by the National Department of Health (NDoH) for provinces, which was in line with the HIV and AIDS, STD Strategic Plan for South Africa (NSP) 2000–2005 and the Comprehensive HIV and AIDS Care, Management and Treatment Operational Plan (2003).

The developed GDoH CCMT training programme is a continuing professional development (CPD) programme which has five modules with broad learning outcomes. The training programme has a didactic component in which learners attend class for 40 hours in 5 days, and the practical component of 40 hours spread over a month. The learners work in groups during the practical work to complete the group portfolio which has pre-written questions that learners should respond to after they have completed a documentary study in the ART site and conducted interviews with healthcare workers working in the ART sites.

The training programme was only used within the Gauteng province as the programme was developed by the Human Resource Development (HRD) and the Public Health Directorate for the Gauteng Province. The CCMT training programme commenced in April 2004 and the last group included for this research was trained in August 2010. By then, almost 5 490 healthcare professionals had been trained within Gauteng province.

In order to expand access to comprehensive care and treatment for HIV and AIDS, there was a need to involve large numbers of healthcare facilities of various sizes and capabilities throughout the country. There was a need to certify service points that were eligible to provide AntiRetroviral Treatment (ART). A service point was a defined geographical area with the capacity to meet the requirements of accreditation through a single hospital or clinic with support services e.g. laboratory service, transport, referral systems and Non-Governmental Organisations (NGOs) within a defined catchment area (CCMT Plan for SA, 2003). “The number of ART initiating sites expanded from 79 in 2009/10 to 265 in 2010/11” (Gauteng Health and Social Development, 2010/2011:101).

1.3 Problem Statement

The HIV and AIDS epidemic is one of the biggest challenges facing South Africa today. The Government is faced with the challenge of coming up with new strategies to address the HIV and AIDS epidemic. Training and development of healthcare professionals is a key imperative in this endeavour. Various training and development programmes have been developed for this cause/purpose. The GDoH CCMT training programme is one such training programme. There was therefore a need to conduct a study to document the learning experiences and challenges encountered by healthcare professionals trained on the GDoH CCMT training programme during transfer of learning from the classroom into the real working environment. Given that such emphasis and funding is placed on training programmes to provide suitably capacitated/qualified staff at ARV service points, it is important to understand more about HIV and AIDS programmes and how they are experienced by healthcare professionals and how they are working in practice.

1.4 Purpose Statement

The purpose of this research was to explore the learning experiences and challenges that healthcare professionals who have been trained in the GDoH CCMT training programme encountered during the process of transferring learning from the

classroom into the real working environment. The information will assist the Gauteng Department of Health (GDoH) to improve the current CCMT training programme. The lessons documented in this research report will be used to improve the CCMT training programme for training healthcare professionals in order to improve the roll out of the ART services.

1.5 Research Questions

The research questions that were developed for this research study were the following:

- What are the perceptions of health care professionals who have been trained in the GDoH CCMT training programme regarding the quality and effectiveness of the CCMT training programme?
- What challenges have the healthcare professionals encountered during the transferring of learning from the classroom into the real working environment post training?
- What are the suggestions for enhancing or improving future ART training programmes?

1.6 Significance of Research

This research study will add to the current available sources of knowledge on the subject of training programmes in HIV and AIDS care and treatment. The results of the study and the future proposed suggestions to improve the ART training programmes will be provided to the GDOH department for consideration in order to improve the training policies and training strategies for the HIV and AIDS programmes.

1.7 The Structure of the Research Report

The research report for this research study has been presented in six chapters namely, (i) Introduction to Comprehensive HIV and AIDS Care, Management and Treatment Training Programme, (ii) Literature Review, (iii) Research Methodology, (iv) Presentation of Findings, (v) Analysis of Findings and (vi) Recommendations.

The researcher for Chapter One has written information about the origin of the CCMT training programme. The problem statement, purpose statement (including the research questions that were used to gather the information from the participants), is discussed.

Chapter Two discusses the literature that has been reviewed for the research study. The literature reviewed included related HIV and AIDS research studies similar to the CCMT focus and their implication to enhance the understanding of this study. The evaluation model used to explore the CCMT training programme has been explained.

Chapter Three discusses the research methodology used in this research study. The research approach, research design, data collection and data analysis process followed are outlined.

Chapter Four presents the findings that have been collected during the process of information gathering using the semi-structured questionnaire that was developed for this research study.

Chapter Five analyses and interprets the research findings from the participants.

Chapter Six reports on the conclusion and the proposed recommendations that have been developed from the findings gathered from the analysis of the findings from Chapter Five.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature reviewed in this research study includes documents directly related to the ART rollout implementation, and different HIV and AIDS care and treatment training programmes from other countries with relevant and/or similar focus to the CCMT training research study. An example of a curriculum development process for HIV and AIDS for the training for comprehensive HIV care and treatment is included. Information on continuing professional development (CPD) and training approaches used in the medical field is also included. The evaluation model developed in 1954 by Kirkpatrick is discussed since the aim of this research was to explore the perception of healthcare professionals about the quality and effectiveness of the training programme.

2.2 Continuing Professional Development (CPD) in Healthcare

2.2.1 Introduction

Information on Continuing Professional Development (CPD) has been included in this section. This information is provided to enable the researcher and the reader to gain an understanding of the transfer of learning from the classroom to the workplace.

2.2.2 CPD in Healthcare

Although various authors have defined and discussed the concept of CPD differently, but all of them have common understanding that CPD has to do with improvement of knowledge, skills and attitude for better performance in the workplace by an individual who is already qualified.

The Health Professional Council of South Africa HPCSA states that:

the purpose of CPD is to assist health professionals to maintain and acquire new updated levels of knowledge, skills and ethical attitudes that will be of measurable benefit in professional practice and to enhance and promote professional integrity. The beneficiary will ultimately be the patient/client (2011: 5).

CPD is an international trend. It is both crucial and necessary to ensure that healthcare professionals remain current and competent at all times. The HPCSA argues that CPD provides a vehicle for professionals to acquire new knowledge and

skills as well as to maintain a core level of competence in their respective field (HPCSA, 2011). Similarly, Brown, Belfield & Field (2002) make the point that CPD for healthcare professionals is an important strategic instrument for improving health services and defines it as post-registration acquisition of skills or knowledge by healthcare professionals. Their definition includes formal programmes as well as use of guidelines, mentoring, and independent study. They argue that resources for health care are scarce, and money spent on CPD could be better used for direct patient care. Hence, they advocate that due to money being spent on CPD programmes there is a need to come up with economic criteria to monitor the costs in relation to the training benefits.

CPD and education are believed to assist practitioners in acquisition of knowledge and skills and/or reinforcement or restoration of previously acquired knowledge and skills. The immediate objective of CPD is to bring about urgent changes in practice and its primary goal is improved professional practice and hence patient care (National Council for the Professional Development of Nursing and Midwifery, 2004).

Luxembourg (2002) discusses the purpose of CPD in relation to the medical field. He defines CPD as the educational means by which doctors ensure that they maintain and improve their medical competences and clinical performance. For this reason, CPD is regarded as an ethical and professional responsibility for every doctor. Doctors should actively engage in CPD that is appropriate to their medical practice and employers should give specific attention to doctor's work environment and provision of enabling resources to support CPD. However, for now CPD registration is not yet a requirement for nurses to annually acquire CPD points in South Africa (National Council for the Professional Development of Nursing and Midwifery, 2004). The reason is that the professional regulatory body for nurses is the South African Nursing Council (SANC) and not the HPCSA. The SANC has not started to implement the CPD points as a requirement for nurses as a criterion to be a legitimate practising nurse.

Baldwin and Ford (cited in Merriam & Brendan, 2005) examined the issue of the transfer of learning in adult education training programmes. They indicated that there are three variables that can hinder or enhance the transfer of learning by participants

back into the workplace environment. The variables are: participant characteristics for example age, sex and years of working experience, programme content and design which also made the doctors in this study to comment about the need for the clinical focus training approach, and the work environment. They made three recommendations that can assist with enhancing the transfer of learning that is:

- (i) the inclusion of a learner in the planning of the training programme
- (ii) building of transfer strategies into the programme design, and
- (iii) a supportive work environment to enable transfer

CPD has to do with improvement and broadening of knowledge and skills for the execution of professional, technical duties throughout the individual's working life, therefore the characteristics of the participant such as pre-training motivation/attitude is vital. This motivation can be stimulated by engaging the participants into making decisions in the training session to get their 'buy-in'. Confidence plays a positive influence on transfer too. Support from managers, and the practicality and relevancy of the training programme enhance this transfer (Merriam & Brendan, 2005).

The inclusion of post-training relapse prevention content during the designing of the programme assists with transfer. This is useful because participants are provided with the opportunity to think about possible situations where their newly acquired skills could be abandoned back in the work environment. Participants are then requested to develop the strategies to employ to prevent transfer failure. One of the ways to build transfer of learning is through the provision of feedback in relation to learning that was mediated in the training programme. Also, one-on-one mentoring and coaching promotes transfer. Managers should also provide participants with the opportunity to apply what has been learned in a training programme. It has been established that a non-supportive climate is a barrier to transfer learning (Merriam & Brendan, 2005).

McCathy and Evans (2003) further report and support the view that resistance to change from colleagues, managers and medical staff are the most frequently cited

barrier to implanting change after CPD training by nurses (National Council for the Professional Development of Nursing and Midwifery, 2004).

The HPCSA (2011) indicates a dimension of CPD which provides for Continuous Education Units (CEUs) (also referred also as CPD points) for the healthcare professionals in South Africa. All registered healthcare professionals (doctors and allied) are required by law to complete continuing education activities each year and gain 30 CEUs/CPD points to remain legitimate practicing healthcare professionals unless they are registered on the non-clinical register. However, for now, CPD registration is not yet a requirement for nurses in South Africa as the South African Nursing Council has not yet started to implement the CEUs/CPD points as a criterion to remain a legitimate practising nurse (National Council for the Professional Development of Nursing and Midwifery, 2004). The CEUs/CPD points are valid for 24 months, which means that healthcare professionals should ensure that they enrol each year to a recognised CPD training programme. Furthermore, healthcare professionals who attend the CCMT training programme receive thirty (30) CEUs.

The conclusion is that the CPD is important for lifelong learning for the healthcare professionals to be skilled and updated on new health trends for the benefit of patients/clients. Doctors and allied healthcare professionals are required to participate in CPD every year to earn the CEUs/CPD points to remain registered practitioners in the medical field and strategies need to be put in place to assist transfer of learning to workplace.

2.3 Teaching Approaches Used In Continuing Professional Development (CPD) Programme in the Medical Field

2.3.1 Introduction

Information on teaching approaches used in CPD in the medical field are included in this study as they will provide guidelines about the training approaches that can be used for CPD training programmes. The focus is mainly on the case study method and portfolios as these were the training approaches used for the CCMT training

programme. The advantages and disadvantages of these training approaches are documented in order to assist with data analysis.

The emphasis here is that the training model should support the type of delivery model of service in the healthcare system (Zeller, 2011). The assumption is made that the training approaches of lectures, case study and group portfolios used for the CCMT training programme were chosen and used by GDoH because these training models were most suitable for the model of the service delivery for the GDoH.

2.3.2 CPD Teaching Approaches: Case Studies

Foran (2001) favours the case method approach because it is student-centered. In addition, this approach is highly interactive and changes the classroom learning process into a collective search for an analysis of and/or solution to a specific problem based on a specific/real live case. The case is a context that provides information about a situation, without analysing it. The students must provide solutions to the problem through the process of facilitated dialogue (Foran, 2001). Grossman (1994) agrees that the case study method provides structures that are conducive to creating dialogue, however, he cautioned that discussions sometimes degenerate into directionless or meaningless debate in which facts are wrong. The skilful facilitator should move closer to the participants to direct the discussion in order to ensure that the participants do not move away from the topic. The appropriate classroom setting is important which provide the participants with writing surface and allowing the instructor to move around. Tables arranged in a U-shape work best. Foran (2001) cites that the goals of the case method are the development of critical thinking skills, learning through decision-making and role-playing situations, developing confidence in defining, confronting, analysing and solving problems through interactive discussions and also developing skills in public speaking and group problem-solving.

Irby (1994) explains the case study approach particularly relevant and frequently used in the medical field to impart knowledge and skills to the healthcare team. The case study models are referred to as case-based teaching models in clinical teaching in medicine. In the medical context, such as this, the patient is used as the case study by experienced clinical teachers. The case study model for clinical

teaching in medicine is different from the case study approach used for the CCMT training which was case scenarios which were discussed by the multidisciplinary team of healthcare professionals.

2.3.3 CPD Teaching Approaches: Portfolios

The CCMT training programme used a group portfolio as a tool to assess competency of the learners. In this study, various portfolio approaches that are used for CPD are discussed in order to provide a broad range of different uses of portfolios to the reader.

HPCSA (2011: 3) defines a learning portfolio as “the record of a health professional’s learning and self development over time, reflecting the health professional’s growth and improved practice”. Challis (1999) uses a different concept of the type of portfolio called the ‘professional development portfolio’, she defines the professional development portfolio (Hall,1992: 81) as “a collection of materials, made by a professional, that records, and reflects on key events and processes in that professional’s career”.

The portfolio approach that is used for the CCMT training programme appears to be similar to that what is described by (Challis, 1999; HPCSA, 2011). However, the difference is that with the CCMT training programme, the approach employed was for a group of individuals to build up evidence for one portfolio that was reviewed by a person and the assessment report or results awarded to more than one individual. Thus, the CCMT training programme required a group portfolio.

Challis (1999) states that whatever the guiding purpose behind the portfolio is, it should be clear to both the learner and the person assessing the portfolio. Some portfolios are developed to demonstrate progression, while others are assessed against specific targets of achievement. The benefits of portfolio-based learning are unique as they depend on the purpose of that particular portfolio. Some of the benefits are based on the goal that a learner is enabled to link theory into real practical experience. Another strength is that assessment is based within a

framework of a transparent and declared criteria and learning objectives and the CCMT training portfolio group assessment had similar assessment criteria.

Driessen, Tartwijk, Van Der Vleuten & Wass (2007) add another dimension of how a portfolio could be structured in order to be effective in supporting and assessing competence. They say that there is a need for robust integration of the portfolio activities into the curriculum and tutor support is essential.

In conclusion, the case study approach discussed is different in approach and application, but the aim is transferring knowledge and skills to a learner. The portfolio approach to learning is also different in application, but all portfolios focus on recording of learning experience at work either individually or in a group. Both of these training approaches are important and both are useful on their own when used appropriately.

2.4 Comprehensive HIV and AIDS Care, Management and Treatment Training Programmes

2.4.1 Introduction

The HIV and AIDS Care, Management and Treatment Training Programmes are some of the HIV and AIDS training initiatives that have been developed by different training providers in collaboration with the department of health. The aim of these training programmes is to empower healthcare professionals or healthcare providers with the skills, knowledge, values and attitudes (SKVAs) to render comprehensive HIV and AIDS care, management and treatment to the patients, clients, families and communities in the healthcare facilities at all of the service levels that includes primary, district, provincial and tertiary levels of hospitals. There was a need for the development of the training programme that would be capable to meet the requirements set by the department of health. Various training programmes have been discussed, compared analysed and analyzed for this research study.

The example of a curriculum development approach for the comprehensive HIV care by Zeller (2011) has been used to identify the key elements that the developers of

any other HIV and AIDS care training curriculum need to take into consideration when developing their own HIV and AIDS care training programmes. Zeller (2011) discusses some of the training methods that are used by different countries depending on the organisational structure of the health system and programme operations. The training approaches discussed could either be decentralised with ongoing mentorship or use a facility based in-service team approach or centralised training for centralised treatment programmes. These training methods have not been discussed in detail in this research as these are not similar to the training approaches that are used for the CCMT training programme for Gauteng.

The lessons of the Nigerian National HIV and AIDS Training programme and the implementation of the ART rollout are discussed, however, the training method used in Nigeria is different from the Gauteng CCMT training approaches. The lessons that have been learned from this study by Zeller (2011) were that the training curricula were modified to reflect the realities faced by the participants in their local settings.

2.4.2 Curriculum Development for the Training for Comprehensive HIV Care

According to Zeller (2011), the Global HIV/AIDS response did not meet the World Health Organisation (WHO) '3 by 5' target of starting 3 million people on ART by 2005. However, this initiative has stirred up global commitment to expand access of HIV care and treatment to low and middle income countries. The commitment came with a public health response to HIV as opposed to a previously "specialists" approach to address the HIV epidemic. The "3 by 5" initiative, the Emergency Plan for AIDS Relief (PEPFAR) and Global Fund to Fight AIDS, Tuberculosis and Malaria has demonstrated the feasibility of delivering the ARVs even in limited resource settings.

Despite the affordability of the ARVs, the ability of the health system has failed to deliver quality care due to lack of sufficient trained healthcare personnel to render ART services. This resulted in the need to develop training programmes to meet this challenge of lack of capacity within the health system (Zeller, 2011).

When countries are planning and designing the training programmes, Zeller (2011) advises that they should take into account the human resource (HR) needs. HR

factors, particularly staffing levels should be based on the prevalence and geographical spread of HIV in the population. The model of service delivery for the HIV treatment programme also needs to be considered.

The finances and training capacity of the health system should also be considered in developing a national training programme for healthcare personnel that could meet the needs of a particular country's ART scale up plan. These plans have been undertaken by the government health officials in collaboration with non-governmental aid agencies and experts in different countries (Zeller, 2011). In South Africa, a similar task team for the planning of a national training programme has been put in place to develop the HIV and AIDS care training programme.

Doing an assessment of the context in which the HIV treatment programme will be implemented is an important part of the planning and design of the training programme. The context to be assessed is in terms of the administrative issues, characteristics of the health system as well as the population it serves, and the existing training resources (Zeller, 2011).

The training model should be based on the healthcare system delivery for the ARTs. In the same way, the development of the training curriculum should be based on the health system needs. The training content for the curricula for different staff categories should be adapted to the level of the health system. The key content making up a minimum basic knowledge for the training programme includes; Epidemiology, Basics of HIV, Reducing HIV transmission, Recognising and testing for HIV, ART, Opportunistic Infections (OIs), Paediatric HIV and orientation to services provided under the new HIV treatment programme.

The training content advocated by Zeller (2011) is mostly similar to the training content of the Gauteng HIV care training programmes CCMT training programme for healthcare professionals.

2.5 The Gauteng CCMT Training Programme

According to the CCMT plan for SA (2003), the focus of the training content for the CCMT training programme was on a comprehensive approach to HIV and AIDS prevention, treatment and care. This comprehensive approach includes the management of the broader spectrum of diseases other than HIV and AIDS related conditions. The specific attention was on the integrated management of childhood illnesses, management of TB, STDs and gender-related issues.

With the CCMT training programme, the Department of Health envisaged that the following competencies would be covered in the training:

- (i) the understanding of the natural history of HIV disease,
- (ii) diagnosis and management of the opportunistic infections,
- (iii) initiation and management of the antiretroviral therapy and
- (iv) the utilisation of referral and consultation mechanisms.

The training approaches for the Gauteng CCMT training programme includes coursework and a practical component in the real working environment. The learners are divided into groups of 5-8 people after the coursework. Afterwards, the groups go back to the workplace environment to complete a group portfolio of evidence under the guidance or supervision of a trained healthcare professional at the Antiretroviral Therapy site.

Learners are also provided with questionnaires with questions about the CCMT training programme and learners are expected to complete it individually as a test and the pass mark is 60%. After a month, the groups come back for one day to present their portfolio reports and hand in their individual assignment to the training provider. The learner is declared competent and provided with a competency certificate only if both the individual questionnaire and the group portfolio assignment have been passed. A detailed curriculum for the Gauteng CCMT is included in Appendix 1.

2.6 Other HIV and AIDS Training Programmes on Treatment and Care

2.6.1 Introduction

In this section, the researcher examines several other HIV and AIDS care training programmes for healthcare professionals used in other countries, like Botswana, the USA and the Makerere University training programme in Uganda. These training programmes are included in order to identify if the curriculum for the GDoH CCMT training programme has included similar curriculum issues. The three training programmes were analysed and summarised with focus on familiar curriculum key factors like the content, course objectives, teaching methods, course duration, course design, and curriculum developers.

2.6.2 Comparative Analysis and Summary of Botswana, Washington and Makerere HIV and AIDS Care Treatment Training Programmes for Healthcare Professionals

2.6.2.1 Course Objectives

For the development of any training programme, it is important that the curriculum developers should identify the intention of the training programme for the client. This activity is accomplished through the identification of the intended results post training. The intended results are mainly in relation to the goals to be achieved through healthcare service delivery by the trained healthcare providers. The three analysed HIV and AIDS training programmes had the following course objectives. The Botswana KITSO program was meant to provide high quality, multi-disciplinary sustainable and standardised training to help healthcare workers understand and apply the Botswana national HIV/AIDS care and treatment guidelines (Harvard School of Public Health AIDS Initiative, 2009). The course developers for the HIV and AIDS training programme for Washington cited the course objectives as a list of training content. The objectives listed were to provide a review of HIV aetiology and epidemiology, Washington State Law concerning confidentiality and testing, legal and ethical issues, transmission of HIV and Infection control, and psychosocial issues associated with HIV/AIDS (Evans, 2011). The course objectives for the HIV/AIDS training programme for Makerere University was to equip doctors and other senior health professionals with knowledge and skills to provide comprehensive HIV services including antiretroviral therapy (ART) (Infectious Diseases Institute, 2007).

The conclusion is that the three training programmes focus was stated differently, but the course objectives were similar. Two of the three training programmes (KITSO and Makerere) focussed on equipping the healthcare professionals with skills and knowledge to render the ART service, the third training programme (USA) focused on the content to be provided to healthcare professionals, but did not say anything about empowering the healthcare professionals with skills to be able to render the ART service.

The GDoH CCMT training programme also listed content that was supposed to be taught to the healthcare professionals in the course like the USA training programme. However, the GDoH CCMT training programme also specified clearly the skills, knowledge and attitude to be acquired post training for the rendering of the ART service by the healthcare professional (See Appendix 1).

2.6.2.2 Curriculum Developers

For the development of a quality and effective training programme, in any field, it is important to engage the specialists in a particular subject matter so that they can advice the developers on the critical content to be included in the training curriculum.

The HIV and AIDS care training programme for the health professionals in Botswana was crafted by Knowledge, Innovation & Training Shall Overcome AIDS (KITSO) in collaboration with the Botswana Ministry of Health (MOH) and Botswana–Harvard AIDS INSTITUTE (HAI) Partnership for HIV Research and Education (BHP) and the financial support from African Comprehensive HIV/AIDS Partnership (ACHAP) in 2001 (Harvard School of Public Health AIDS INITIATIVE, 2009).

The HIV and AIDS healthcare training programme for Washington was developed by the office of AIDS in collaboration with the Revised Code of Washington (RCW) responsible to enforce permanent laws (Evans, 2011). The HIV/AIDS training programme for Makerere University was developed by the Infectious Diseases Institute (IDI) in collaboration with the University Faculty of Medicine in 2007 (Infectious Diseases Institute, 2007).

In conclusion, the discussion of the three curriculum developers indicates that the curriculum developers were specialists in terms of content and curriculum development from both the Department of Health including the universities and research units in HIV and AIDS. The GDoH CCMT training programme was also developed by the experts in HIV and AIDS, the universities, HIV and AIDS researchers and the HIV and AIDS – Public Health directorate in the Department of Health.

2.6.2.3 Training Providers

For a training programme, the training providers should be trained healthcare professionals who have expert knowledge/experience in the specific field or subject matter. Similarly, curriculum developers can also become the training providers for the training programme if that was a mandate or permitted. For instance KITSO was a partner in the development of Botswana HIV and AIDS care and treatment training programme and they became the training provider for the same programme (Harvard School of Public Health AIDS Initiative, 2009). The content of the Washington training programme does not designate the training provider. The assumption is that the programme is managed and delivered by the AIDS office and approved partners who are expert instructors. The content in the training curriculum states that the Washington regulatory entity accepts education and training programs that are consistent with the model curriculum available from the office on AIDS only. This could mean that the AIDS office could be the training provider (Evans, 2011). In Uganda, the Uganda training programme was developed by Makerere University and it is also conducted by the university (Infectious Diseases Institute, 2007). In Gauteng, the GDoH training programme was developed in collaboration with the universities, HIV and AIDS researchers, Foundation for Professional Development (FPD) and Wits – Consortium (Reproductive Health Research Unit for HIV and AIDS, Wits Paediatric Unit and Perinatal Health Research Unit) who were also curriculum developers.

2.6.2.4 Course Content

In 2009, the WHO encouraged member states to embark on strategies to halt the advance of HIV and AIDS by 2015 (WHO, 2009). The HIV and AIDS training programme are a response to the agreed Millennium Development Goals (MDGs) by the United Nations Member States in 2000. To meet these goals, countries needed to customise training programmes to suite their training and human resource needs.

With reference to the three HIV and AIDS training programmes of Botswana, Uganda and Washington, it is evident that the training content was adapted in line with the HIV and AIDS MDG Goals four, five and six. The MDG goals are to reduce child mortality to improve maternal health and to halt the spread of HIV and to achieve the universal access to treatment for HIV and AIDS for all those who need it (WHO, 2009). The training content seems to be similar with the main content being HIV Epidemiology and Pathophysiology; Laboratory Diagnosis in HIV/AIDS Care; Principles of ART Therapy in Botswana National Program; Paediatric and Adolescent Specific Issues in HIV/AIDS Psychosocial Care; ART Drug Side Effects and Toxicities; Drug to Drug Interactions in ART Therapy; Treatment Failure and its Management; Adherence in ART Therapy; Adult and Paediatrics Opportunistic Infections and Other Complications in HIV Disease; Mother to Child Transmission and its Prevention; Post Exposure Prophylaxis (PEP); TB and HIV Co-Infection; Summary of the Major Changes in the 2008 Guidelines (Evans, 2011, Harvard, 2009 & Infectious Diseases Institute, 2007).

The GDoH CCMT training programme has similar training content, and has added information on the management of the broader spectrum of diseases other than HIV and AIDS related conditions.

2.6.2.5 Course Design

The course design for these three HIV and AIDS training programmes for Botswana, Washington and Uganda are similar. Each was developed as modular training programmes (Evans, 2011; Harvard, 2009 & Infectious Diseases Institute, 2007). In the same way, the GDoH CCMT training curriculum is also a modular training programme.

2.6.2.6 Course Duration

The training duration for the three training programmes varied as follows. The Botswana training programme consists of four days of lectures and case study discussions. In the Washington training programme, for the course to be recognised, should cover at least seven (7) hours and the Uganda training programme is a three week programme (Evans, 2011; Harvard, 2009 & Infectious Diseases Institute, 2007). The GDoH CCMT training programme is five days contact sessions and one month of practical work. The assumption could be made here is that the course duration was aligned to the service delivery mode used in each particular country.

2.6.2.7 Training Strategies

The training strategies for these three training programmes varied. The Botswana training strategies were lectures and case study discussions. Washington training strategies required an expert instructor to present the course and to answer technical questions. In the Makerere University training programme, the teaching strategies include lectures, journal club discussions, case presentations, and clinical mentoring sessions that allow hands-on experience at the start of ART and monitoring of patients.

The conclusion here is that lecturing was used by all the three countries; however, Makerere used more than one training strategy (Evans, 2011; Harvard, 2009 & Infectious Diseases Institute, 2007). The GDoH CCMT also used lecturing and added the work-based portfolio which needed a trained supervisor to mentor a learner. All these training strategies are important and useful on their own when used appropriately.

2.6.2.8 Target Group

The target group for each of these three programmes were healthcare professionals. However, in medical terminology the concept healthcare professional refers to all the multidisciplinary healthcare practitioners, such as: doctors, pharmacists, dieticians, social workers and nurses. The GDoH also had the multidisciplinary team trained in

the same course made up of doctors, pharmacists, dieticians, social workers and nurses.

2.6.2.9 Competency Post Training Skills and Knowledge Acquired

The Botswana training programme highlighted that through the KITSO training the healthcare professionals in Botswana gained expertise and confidence to provide the ARV therapy and train other healthcare workers at their treatment sites (Harvard School of Public Health AIDS INITIATIVE, 2009).

The Washington training programme, stipulated the learning outcomes for the course in knowledge terms. This means that on completion of the course participants would be able to trace the etiology and epidemiology of HIV in Washington State and worldwide, name the factors affecting risk for transmission of HIV in general and among healthcare workers in particular, list confidentiality and legal reporting requirements in Washington State for HIV and AIDS and summarise the psychosocial issues associated with HIV/AIDS (Evans, 2011).

The Makerere University training programme did not document any information about the expected competency in relation to the skills and knowledge post-training. The assumption is that the University assumes that the healthcare professionals would be able to implement the ART services after the three-week long training programme (Infectious Diseases Institute, 2007).

The GDOH expected the healthcare professionals to acquire the skills and knowledge to render the ART services. That is:

- (i) the understanding of the natural history of HIV disease,
- (ii) diagnosis and management of the opportunistic infections,
- (iii) initiation and management of the antiretroviral therapy and
- (iv) the utilisation of referral and consultation mechanisms.

In conclusion, the comparative analysis of the three HIV and AIDS care and treatment training programmes for healthcare professionals indicates that each

country was responding to the specific mandate of their country to address the HIV and AIDS epidemic in specific ways. At the same time, the training programmes seemed to have similar curriculum approaches and the content covered in the curricula was what had been outlined under the curriculum development for the training for HIV and AIDS care discussed in detail by Zeller (2011). The GDoH training programme has similar content, training strategies and provided healthcare professionals with the similar knowledge and skills to render an ART service similar to the other three training programmes.

2.7 Related Studies in HIV and AIDS Training Programmes and ART Roll-out Issues

2.7.1 Introduction

The researcher has identified research studies conducted on issues related to the Antiretroviral Treatment (ART) roll-out and implementation. These studies are related to the research study of the GDoH CCMT training programme as they focus on issues around HIV and AIDS treatment and care. The literature provides additional information about the challenges that may be experienced by the healthcare professional when transferring learning back into the work environment.

2.7. 2 Issues raised on the ART Roll-out

According to Teixeira, Vitoria & Barcaralo (2004), the Brazilian HIV/AIDS drug policy made it possible for Brazil to be the first developing country to roll-out the Highly Active ARTs (HAART) free since 1996. The improved quality of life for HIV positive patients and savings in medical costs are the reasons for the ART roll-out in other developing countries, including South Africa in 2004.

According to Jaffar, (*et al.*, 2005) poor resources might contribute to poor ART roll-out in the workplace. They add that the models of delivering the ARTs play a role in the success of implementation of the ART programme. Therefore, African countries should decide about the relevant model of ART delivery in relation to the healthcare system of their country as each model has its own advantages and disadvantages.

The specialist delivery model where services are rendered by a specialist in relation to the HIV and AIDS programme requires that there must be enough doctors and currently there is severe shortage of doctors.

The primary health care delivery model requires special training for nursing staff and the challenge is that there is mobility and high turnover of nurses in the clinics. The peripheral health centres like home-based care are often poorly equipped, overburdened and upgrading of these facilities is not easy. The non-clinically qualified 'lay' workers might not be as effectively trained as nursing staff hence there are challenges to manage the ART services like screening and history taking and making decisions to transfer patients to a higher level of care.

Van Rensburg-Bonthuyzen (*et al.*, 2008) studied the issue of resources and infrastructure in the primary health care (PHC) facilities in Free State. The ART roll out at the PHC facilities is a second model of implementation as indicated by Jaffar (*et al.*, 2005). All models like specialists service are delivery by specialised doctor, Primary healthcare models where nursing personnel consult patients in the absence of the doctor have their own advantages and disadvantages which are associated with shortages of doctors and high turnover by Jaffar, (*et al.*, 2005). Poor or limited resources might contribute to poor transfer of skills and knowledge to the workplace and therefore hinder quality implementation of the ART roll-out programme in any set up.

Sow, Otieno, Bissagnene, Kityo, Clevenbergh, Ferdinand, Waalberg, Tobias, de Wit, & Lange (2007) indicate a similar anticipated challenge with the implementation of the ART rollout in that it could be hindered by limited resources. Thus, resources from donors to improve any situation have been cited as a solution to promote the rollout of the ARTs.

Ojikutu (2007) highlights the issue that in 2006, 2 million HIV-infected people living in low-middle-income countries were receiving ART. However, significant operational challenges have inhibited the progress toward universal access to HIV care and

treatment. The current reality of ART roll-outs is that of providing long-term, quality care and treatment for the masses infected with HIV is overpowering and exhausting due to limited resources. The lack of well-provisioned infrastructure is a challenge to clinics, hospitals, operational laboratory services. Shortages of trained healthcare workers and managers are also a challenge.

As a response to the challenges, there has been an influx of new bilateral and multilateral funding and access to ART has increased since 2004 in the regions of the world most highly impacted by HIV. This source of funding needs to be expanded in order to overcome the challenges for the successful rollout of ART. In South Africa, it is reported that approximately 300 000 patients had access to treatment by March 2007(Ojikutu, 2007).

The expansion of HIV care and treatment in Africa and other resource-limited parts of the world has been an important step forward in mitigating the impact of the HIV pandemic on individuals, communities and nations. The challenges now facing the global community and national governments involve:

- (i) how to most effectively scale up HIV treatment from thousands to millions,
- (ii) how to ensure quality and
- (iii) how to sustain large public treatment programmes over time given limited resources (Hirschhorn, Ojikutu, & Rodriguez, 2007).

Johnson (2012) highlights the recent ART roll-out figures of access to antiretroviral treatment (ART) in South Africa between 2004 – 2011. He refers to the ART target that was set in the South Africa's National Strategic Plan (NSP) for 2007 – 2011 which aimed at achieving new ART enrolment numbers equal to 80% of the number of new eligible individuals in each year by 2011. By the middle of 2011, the number of patients receiving ART in South Africa had increased to 1.79 million; this figure has been documented as having exceeded the ART target in the 2007- 2011 NSP, but men and children have been reported to be accessing ART at a lower rate than women.

Yet, the provision of HIV treatment and care and having all the resources in place for the ART roll-out is not sufficient. One of the critical factors to these initiatives is the patient's adherence to taking ARTs correctly. Stone (2001) states that Highly Active ART (HAART) requires that patients maintain nearly perfect adherence to the prescribed regimen. Failure to adhere to the HAART is the most common cause of virologic failure of HAART regimens. Adherence is important to achieve therapeutic success. The knowledge and skills of the healthcare provider is crucial to the success of adherence by patients, though characteristics of the patients like age, sex, educational background race plays a role too. Maokisa (2011) add that to enhance good adherence the ART roll-out should also be monitored at the lowest level health care facilities. More nurses should be trained on prescribing and dispensing of the ART and patients should be given at least two months supply of ART.

The provision of HIV treatment and care in resource-limited settings is expanding rapidly. Health-worker training is one of many factors critical to the rapid scale-up of high quality care (McCarthy *et al.*, 2006) Therefore, the training of the healthcare professionals through the CCMT training programme was considered essential for the GDoH to strengthen the ART roll-out in Gauteng.

Hanefeld & Musheke (2009) highlight the issue of the human resource crisis facing many countries heavily affected by HIV and AIDS which are receiving funding from the the Global Health Initiatives (GHI) especially the United States Presidential Emergency Plan for AIDS Relief (PEPFAR), the global fund to fight HIV, TB and Malaria and the World Bank Multi-country AIDS programme. Their research focused on the GHI's ability to contribute to retain and retrain staff and also on unintended consequences of their programmes on human resource for health. The assumption here is that South Africa could be facing the same challenges; therefore South Africa has to come up with strategies to retrain and retain current existing staff as one of the strategies to ensure the success of the implementation of the ART roll-out.

The articles by various authors about other related studies on HIV and AIDS and their experiences with ART roll-out has provided information on some of the

challenges of other countries. The issues about poor treatment adherence, lack of resources and infrastructure related to the poor settings or limited resources are cited as potential causes to hinder the successful ART roll-out. Therefore there is a need for the Department to ensure that appropriate human, financial and physical resources are in place for the ART roll-out services.

2.8 Evaluation of Training Programme

2.8.1 Introduction

The researcher evaluated the GDoH CCMT training programme for the healthcare professionals by exploring the learning experiences and challenges encountered by trained healthcare professionals in transferring learning from the classroom into the real work environment. The design for this study was based on the 1954 model by Kirkpatrick of evaluating training programs.

2.8.2 Purpose of Evaluation

McCain (2005: 10-12) says that:

gathering data and conducting an analysis only provides information and for that reason the information gathered should be used for some purpose.

The exploration of the CCMT training programme research study assumed that the research study would provide the GDoH with information about the quality and effectiveness of the CCMT training programme and expose the health systems factors that support or hinder the transfer of the new knowledge and skills on the job.

2.8.3 Model for Evaluating the Training Programme

McCain (2005: 2) says that “evaluation is a process, supported by methods, tools, and instruments”. He further highlights the important issue that evaluation is not to be done at the end of a course only instead evaluation needs to be done before, during and after the course.

The CCMT training programme had the pre-test evaluation questionnaire which were used before the commencement of the course, and there was also a post-test evaluation questionnaire used to evaluate or compare the knowledge improvement

of the participants, before and after the five day class work contact session. However, for this study the focus was after the participants have completed training on both course work and group portfolio.

In 1954, Kirkpatrick wrote four articles based on his dissertation for the Training and Development of the American Society for Training and Development (ASTD). The articles were about Evaluating Reactions, Evaluating Learning, Evaluating Behaviour, and Evaluating Results. Even today, the concepts, principles, and techniques of the training evaluation model by Kirkpatrick are applicable as they were when the model was first introduced (Kirkpatrick and Kirkpatrick, 2005: 3).

Table 2: Kirkpatrick's Four Levels of Evaluation

LEVEL	FOCUS
1 st Level	Measurement of participant's reaction to the training, it is like a customer satisfaction measure because it involves collecting subjective perceptions and feelings of the participants.
2 nd Level	The evaluation focuses on content areas that participants either learned or did not learn or whether or not they demonstrated a skill or demonstrated behaviour
3 rd Level	The third level is evaluation of the participants' behaviour change in the real work environment. That is evaluation of the transfer of the acquired knowledge, skills, and abilities from the learning environment to the job.
4 th Level	The fourth level evaluation is the process of determining the final business results that occurred as a result of training. It is the process of determining how much the training contributed to the shift in the business mission identified in the initial business analysis and recorded on the evaluation plan. The impact is the actual shift in the business mission.

(Adapted from McCain, 2005)

For this study, the researcher focused on the first and the third level of evaluation. The inclusion of level two and four evaluation was not possible. The study was conducted after classroom learning has taken place and level four focuses on impact which requires more time to conduct the evaluation. The timeframe for the completion of the Masters Management Degree for which this research was conducted was a constraint.

The purpose of the study was to explore the learning experiences and the challenges encountered by healthcare professionals during transfer of learning from the class into the real work environment of the CCMT training programme. In conclusion, the researcher used the first and third level of Kirkpatrick's training programme evaluation model for this study. For the third level data used were the participant's self-analysis of their behaviour change post training.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research methodology framework and the processes of how each research step was conducted is discussed. A qualitative research approach and an interpretive research design were used in this research study. The sample of participants was selected using non-probability sampling. In-depth interviews were

used for data collection. The chapter concludes with information on analysis of the data.

3.2 A Qualitative Research Approach

According to Neuman (2011), there are two approaches that are used for conducting social research; these are known as the qualitative and quantitative approaches. Merriam (2009: 5) states that:

the qualitative approach is the research approach in which the researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences.

In this research, the researcher used a qualitative, interpretive research approach since the purpose of this study was to explore the learning experiences and challenges encountered by the healthcare professionals during the process of transferring learning from the course into the real work environment. More specifically, the qualitative research approach enabled the researcher to understand how the healthcare professionals have interpreted their learning experience and how they have constructed their worlds and the meanings they attributed to their own learning experiences.

3.3 Research Design

The research design used in this research study was an interpretive study. Neuman (2011: 72) states that “the interpretive theorist attempts to discover the meaning of an event or practice by placing it within a specific social context”. “The researcher then gives data meaning, translates and makes data understandable” (Neuman, 2011: 160). This study on CCMT training programme was attempting to discover the meaning of the CCMT training programme from the healthcare professional’s point of view in relation to the relevancy and effectiveness of the training programme to equip them with the skills and knowledge to render the ART services. The researcher developed a semi-structured questionnaire with open-ended questions. The questionnaire was used to explore and document the learning experiences and

challenges encountered by the healthcare professionals during the transfer of learning into the real work environment. The data are analysed and discussed in Chapter Five.

3.4 Sampling

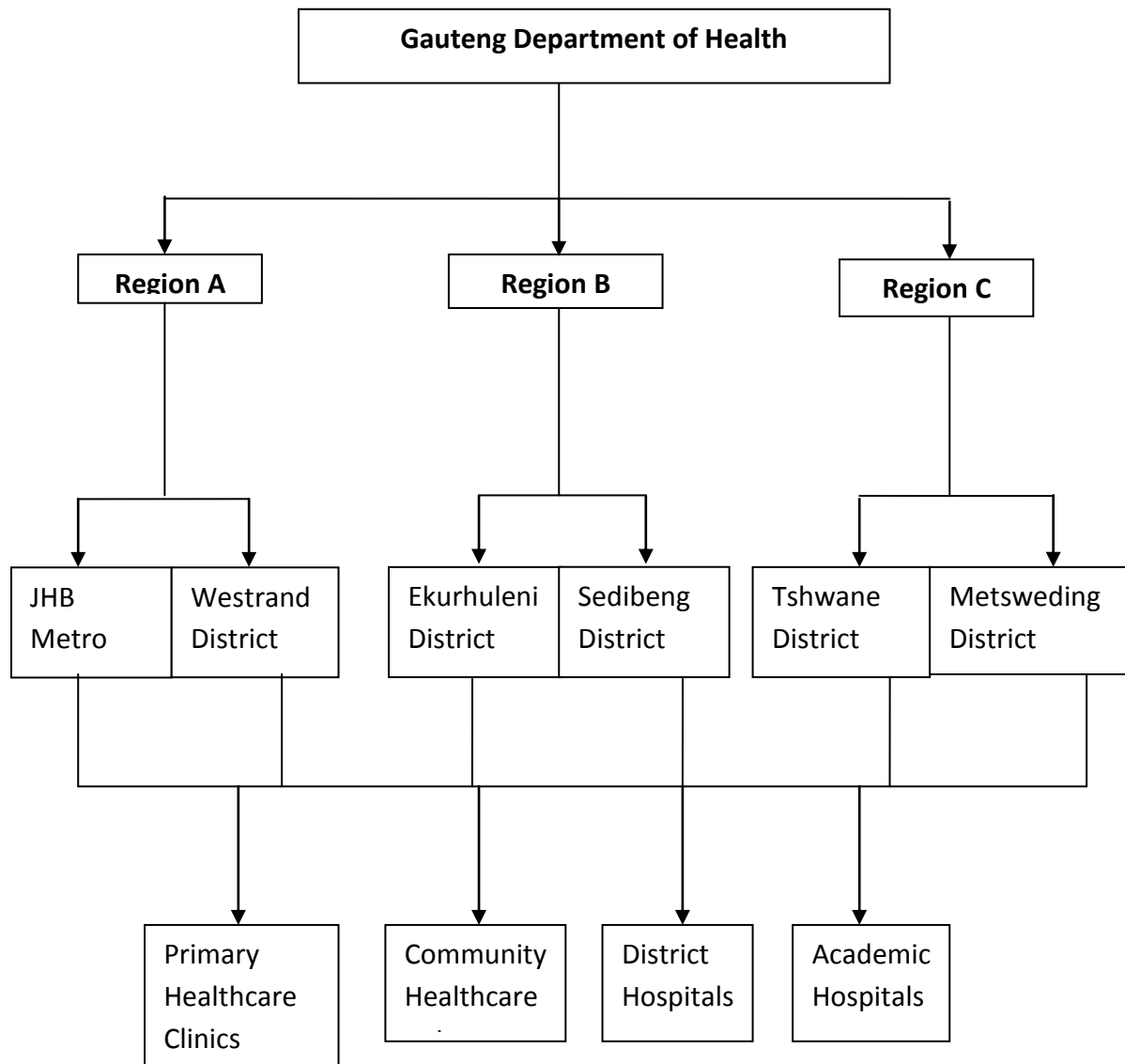
According to Neuman (2011: 219) “the primary purpose of sampling is to collect specific cases, events, or actions that can clarify and deepen understanding”. Merriam (2009) states that there are two basic types of sampling methods probability and non-probability sampling. Qualitative researchers are inclined to use nonprobability or non-random samples. This approach means that the “researchers rarely determine the sample size in advance and have limited knowledge about the larger group or population from which the sample will be taken” (Neuman, 2011: 220).

The researcher used non-probability sampling as this is the method of choice for most qualitative research. Therefore, due the fact that the CCMT training programme research study is qualitative research non-probability sampling was used. Purposive or judgemental sampling was used as the researcher selected cases with a specific purpose in mind and for in-depth investigation (Neuman, 2011). The selected participants for the sample for the interview were twelve healthcare professionals who have been trained on the GDoH CCMT training programme who were willing to participate in this study. The sample comprised of six professional nurses and six medical officers. It was important to select the different healthcare professional categories for this study in order to be able to explore the learning experiences and challenges encountered by different staff categories as they were trained on the same programme. The source for the participants database was provided by Foundation for Professional Development (FPD) who was one of the curriculum developers and training providers.

The context of this research study was the workplace as a site for learning. For the CCMT training programme participants for this study were working in the real workplace at the ART sites, therefore it is important to indicate the various levels of

service delivery which were utilised for this research study. The diagram below represents the GDoH workplace structural lay-out.

Diagram: 3 The GDoH Workplace Structural Lay-out



The GDoH is divided into three regions and each region is divided into two districts. The districts are sub-divided into sub-districts which are from four to eight in number, and it was not possible to include them in this diagram. The district might have a district hospital, provincial hospital or an academic hospital and one or two community healthcare centre/s and many primary healthcare clinics which are located in the sub-districts.

To gather valid and reliable information, the researcher wanted to focus on three to four facilities in the Westrand district only as the district was convenient and easily accessible for the researcher. However, the sampling method was also purposive as the researcher selected cases with a specific purpose in mind and for the in-depth investigation. However, due to shortage of doctors willing to participate in the study from Westrand the scope was extended to JHB Metro District. Six various types of facilities were used for the research, which were two community health centres (CHC) which operate 24 hours due to the maternity ward, two hospitals which have approved ART sites and two primary healthcare (PHC) clinics with approved ART sites.

3.5 Data Collection

According to Creswell (2003: 185),

the data collection steps include setting boundaries for the study, also collecting information through unstructured (or semi-structured) observations and interviews, documents and visual materials, as well as establishing the protocol of recording information.

The primary data collection method for this study was in-depth interviews. The interviews were face-to-face in order to understand the experience of the participants from their own point of view. The participants can be trained in the same training programme, work in the similar work setting but can differ with how they perceive and interpret the same setting. The same semi-structured interview schedule with open-ended questions was used for all the participants (this is included in Appendix 7). The digital voice recorder was also used to record the responses from the participants to ensure that the researcher records any potentially useful data thoroughly, accurately, and systematically (Leedy, 2001).

The researcher also collected information from Departmental documents like annual reports, strategic documents like the comprehensive HIV and AIDS care treatment and the plan for the roll-out of the ART programmes which included the ART roll-out, journals and previous research reports documented by various authors.

The researcher interviewed six medical officers (three males and three females) and six professional nurses (five females and one male) trained on the GDoH CCMT training programme. The participants who were willing to participate in this research study were from six various types of facilities which were two community health centres (CHC) which operates 24-hours due to the having a maternity ward, two were from hospitals which have approved ART sites and two were primary health care (PHC) clinics with approved ART sites.

The researcher established rapport by asking the participant what made the participant willing to participate in the research study. The nature of the research study was explained to all the participants and participants' information documents are provided (Appendix 6). The researcher explained the content of the interview consent form (Appendix 5) to all the participants and that their participation was voluntarily including the ethical considerations of harm, anonymity and privacy before they signed it. The interviews were conducted in the offices and some outside the facility behind the building to avoid distractions and interruptions. The researcher did not interrupt the participants when they were responding to the questions. The researcher repeated and paraphrased the questions when it was evident that the participant did not understand the question or where there was ambiguity. The duration of the interviews was between one to two hours per interview.

3.6 Data Analysis

Data analysis is the process of making sense out of data and this

involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read, therefore data analysis is the process of making meaning (Merriam, 2009: 175).

Neuman (2011: 457) states that “qualitative data analysis has moved to a more explicit and systematic step by step approach”, but he concludes by saying there is no single qualitative approach that is widely accepted.

For this research, data analysis was initially conducted simultaneously with data collection. After each interview, the researcher read and wrote down notes, comments, and queries from all the transcripts of each respondent. Data were coded

after each interview. In the second round of data analysis, data were consolidated, reduced and coded by assigning different alphabets to classify information. The table of responses of participants is included as Appendix 9 for reference. The responses of participants to questions were grouped into two categories that was doctors and professional nurses with numbers allocated from 1–6 to indentify the respondent. The responses to questions were written under each participant for each question, and alphabets (A – E, or A & B) depending on the number of sub questions from the three main research questions were used to code data. The themes were identified, compared, developed from the content that was gathered from the respondents from each research questions. Then the content of each theme was compared and analyzed. The findings are presented in Chapter Four.

CHAPTER 4: PRESENTATION OF DATA

4.1 Introduction

This chapter presents the data gathered from six medical doctors and six professional nurses trained on the GDoH CCMT training programme. The respondents were: three male doctors, three female doctors, one male professional nurse and five female professional nurses. The participants were from two

community health centres, two primary healthcare clinics and two hospitals which have an approved ART site (see Appendix 8).

The data were gathered using a semi-structured interview questionnaire with three questions which had sub-questions. The questions developed were used to explore the learning experiences, the challenges that the healthcare professionals trained on the GDoH CCMT training programme encountered during transfer of learning from classroom to the real working environment. The themes were identified and developed from the information gathered from the respondents for each interview question.

The answers were put into the categories developed prior to the analysis. The categories were:

- the perceptions of trained healthcare professionals about the quality and effectiveness of the CCMT training programme,
- the challenges encountered by the healthcare professionals during transfer of learning from classroom into real working environment post training,
- and the suggestions for enhancing or improving the future ART training programmes.

The responses from all the interviewee with some quotations for the same question are documented together in the report below.

4.2. Perceptions about the Quality and Effectiveness of the CCMT Training Programme

4.2.1 Usefulness of the Training Content

The six doctors were asked for their perceptions about the content they found useful from the CCMT training programme in terms of its quality and effectiveness for their work. All six doctors said that they found the content about the epidemiology, diagnosing of patients using the World Health Organisation (WHO) staging, drug

regimen, the ARVs, management of opportunistic infections (OIs) and side effects, and information on adherence counselling to be useful. The content was useful as it covered the information that was considered adequate to provide the healthcare professionals with skills and knowledge to care, treat and manage patients who are infected or affected with HIV and AIDS disease.

All six professional nurses provided similar responses pointing to the same content mentioned by the doctors. Professional Nurse 1 summed up the views of others and said that:

For me, the main useful content was the drug regimen.

The nurse elaborated on this by saying that the drugs can be detrimental to a person's life if administered incorrectly.

The participants in this study seemed to perceive similar content to be useful to empower them with the skills, knowledge and attitude to render the ART roll-out services.

4.2.2 Content Found not to be Useful in the Training Programme

The six doctors were asked to reflect on what content they did not find useful in terms of its quality and effectiveness for implementing the ARV roll-out.

The doctors had different views. Three doctors (2, 3 & 4) felt that the content was not clinical enough. Doctor 2 summed up the views of others by saying:

the content was not clinical enough or advance enough for doctors as it did not equip practitioners to go and start to implement the ARV roll out.

Doctor 3 who also felt that the content was not clinical enough said that the content had too much theory and not enough clinical practice content for implementation into the real work environment.

The other two doctors (5 & 6) felt that the training content was effective and of good quality. Doctor 1 felt that the content was not relevant for doctors and said the following:

lot of information was not relevant for doctors like demographics.

The majority of the professional nurses said that the entire content was useful. Professional Nurse 2 who found the course useful concluded her response by saying:

the content was all useful as I was a newly trained professional nurse.

Professional nurse 3 pointed out that the information on demographics was not useful.

It seems as though the majority of professional nurses perceived the content to be useful. The doctors had different views; some felt that the content lacked the clinical content for implementation in the real work environment. The demographic content was also identified as not relevant for rendering the ART service.

4.2.3 Knowledge and Skills Acquired

The six doctors were asked to reflect on the knowledge and skills they believe they have acquired from the course content to do their job after training.

Five of these doctors responded by saying that the knowledge and skills they acquired from the course content to do their job was mainly in diagnosing through staging which is a WHO technique to examine patients and give them a diagnosis prescribing the correct treatment using the correct drug regimen, management of opportunistic infections (OIs) and side effects and counselling of patients on the importance of adherence for treatment compliance. Doctors 4 and 5 felt that the course empowered them and they were able to manage and treat the patients as a whole in relation to diagnosing and prescribing drugs and treating and OIs, if any. Doctor 2 was the only one who felt that the course did not empower her with skills and knowledge and concluded her response by saying:

the course did not equip practitioners to go and start to implement the ARV roll-out.

The six professional nurses replied that they are empowered and they have acquired the same knowledge and skills mentioned by doctors to do their job. The difference between the doctors and nurses is that all nurses felt empowered to render the ART

service, however one doctor had a different view from all other participants as she reported that the course did not equip practitioners to start the ARV roll-out.

4.2.4 Instructional Strategies

The six doctors were asked to reflect on the different instructional strategies used for the CCMT training programme and how they experienced these instructional strategies during training.

The majority of doctors said that the instructional strategies used were effective and that lectures and case study discussions were used. Doctor 1 added by saying that the:

case studies helped to assimilate the actual situation.

Doctor 2 felt that the format of the PowerPoint presentation was good but raised the point that the group discussion with mixed group composition of healthcare professionals was a weakness, because other professional nurses were inexperienced in the clinical practice. The doctor concluded by saying:

the group discussion is useful but mixed group of healthcare professionals is a challenge because as a doctor you find yourself conversing with people who had little or no clinical experience at all.

The other four doctors (3, 4, 5 and 6) had different views from Doctor 2 about the issue of having the multidisciplinary team in the same class. They said that it was beneficial to have a mixed group of healthcare professionals in the same training. Doctor 4 summed up by saying that:

group work was useful to share knowledge and experience.

Doctor 1 did not raise any remark about the mixed group.

All six professional nurses also said that the teaching strategies used were lectures and case studies in group work. They all felt that group work to discuss cases was the best training strategy and that to have a multidisciplinary team promoted dialogue to gain clarity. Nurse 1 summed it by saying:

group work to discuss the case studies was useful as the groups were made up of mixed staff categories that had different skills and experience in their respective field. The mixed group of healthcare professionals in class was useful to the group as the case studies were viewed holistically with information from various perspectives.

The case study method seemed to be preferred by the majority of participants in this study.

4.2.5 Useful and not Useful Instructional Strategies

The six doctors were asked to reflect on what they found useful and not useful about the instructional strategies used for CCMT training.

Three of the doctors raised comments about the group portfolio that is used as a competency assessment project. They gave different views about the group portfolio. Doctor 1 and 2 said that the group portfolio was a very good teaching method. Doctor 2 summed up by saying:

the group portfolio gave me insight on how the ARV clinics are run and also their pitfalls like shortage of staff.

In contrast, Doctor 3 felt that the group portfolio was not a useful teaching strategy and concluded by saying:

the group portfolio was complicated as it was not clinical practice for doctors

which means it was not focusing on examining patients as cases.

Three Doctors (4, 5 and 6) raised comments about the group work discussions. They said that the group work was useful to share knowledge and work experience from workplace with different categories like pharmacists who contributed with their field work expertise. Doctor 5 summed up by saying that:

It is very useful to have the team in one training.

All six nurses felt that the case study teaching strategy was useful and to have a mixed group in the same course. Nurse 3 summed it up by saying that:

case studies were useful, group members helped with intervention on different cases mixed skills helped e.g. social workers with psychological information and pharmacist with drugs expert knowledge.

Nurse 4 concluded by saying that:

group work was more useful with mixed groups of team to share expertise.

Nurse 5 who felt positive about the case study method felt negative about the group portfolio and said that:

I did not like a group portfolio as some group members did not attend regular meetings and delayed progress as there was a need to bring them on board whenever they decided to attend on the next meeting.

Nurse 1 felt negative about the facilitation style of the lecturers and concluded by saying that:

it was not useful when the facilitator failed to engage the group and just lectured without learners actively participating.

Participants had different views about which instructional strategies was found useful and not useful. The portfolio and group work for case study discussion were the main instructional strategies discussed.

4.3 Challenges Encountered during the Transfer of Learning from the course into the real Working Environment

4.3.1 Challenges Experienced

The six doctors were asked to reflect on the challenges they experienced during transfer of learning into the real workplace.

Four doctors (1, 2, 5 & 6) said that there were no challenges experienced during transfer of learning. Doctor 1 of the four doctors said that:

there were no challenges as the resources in terms of drugs and national guidelines were available to assist me to do work in real work practice.

Doctor 5 of the four doctors supported Doctor 1 by saying that the drugs were available including staff. Doctor 6 of the four doctors added that there were staff, drugs and furniture and the ART clinic was fully established. Two doctors (Doctor 3 and 4) said that they experienced challenges during the transfer of learning. Doctor 3 said that lack of information on practical issues during teaching of content hindered the post training transfer of knowledge which was long after theory contact sessions. Doctor 3 elaborated by saying that:

for doctors to learn a clinical skill better it is best to teach them content in class and allocate a mentor in the real workplace so that from the class session they go directly to the practical environment the same day to implement the theory into practice ,the CCMT training lacked that integration.

Doctor 4 supported Doctor 3 by saying that:

the course did not teach enough clinical issues for doctors.

Three nurses (2, 3 and 6) said that there were no challenges experienced during transfer of learning. Nurse 2 said that the ART site already had trained professional nurses who mentored her. Nurse 3 elaborated and said that:

I worked at the ARV site which had complete staff doctors, dietician, social workers and pharmacist and the office space was also okay.

Nurse 6 said similar information with Nurse 3 and concluded by saying that:

the space was enough to accommodate all the staff and the drugs were available.

The other three Nurses (1, 4 and 5) said that there were challenges experienced during transfer of learning. Nurse 1 and 4 raised the issue of inadequate office space

which compromised service delivery in relation to consulting and counselling patients. Nurse 1 elaborated and said that:

learning was not transferred immediately into practice due to inadequate office space to start the ART service.

One consulting room was used for primary healthcare service until 12:00pm daily in order to accommodate the ART service which started from 12:00pm. The other issue was that the ART drug cupboard was kept in the same room with all other PHC drugs and perceived this practice not to be safe as all staff members in the clinic had access to the key to the drug room.

Nurse 4 who was supported by Nurse 5 also raised the issue of work-load due to staff shortage caused by other team members who resigned and professional nurses had to also perform tasks for experts like social workers relieving each other with the lay counsellors with counselling of patients. Nurse 5 supported Nurse 4 citing the issue of staff shortage and summed up by saying that:

shortage of staff like dietician and doctors who rotates within different facilities to render the expert functions in the ART sites resulted with failure to provide the patients with a comprehensive care service as patients had to be given an appointment date to come back again to consult the other health experts.

4.3.2 Application of Knowledge and Skills Acquired

The six doctors were asked to reflect on how they applied the knowledge and skills they acquired from the classroom into the workplace. All six doctors self-reported that they were able to apply the knowledge and skills they acquired from the class in the workplace and that there was change in their behaviour in relation to work performance as they were able to care manage and treat the patients holistically.

All six doctors said that they applied the knowledge and skills into the workplace by using the HIV and AIDS care and treatment national guidelines. They referred to the protocols on how to diagnose the patients using the WHO staging, and they also prescribed the drugs using the protocol in the guidelines on treatment regimen.

Four doctors (Doctors 2,3,4 and 5) added by saying that they also used the course pack to find information on how to manage difficult cases and they discussed difficult cases with colleagues and other doctors in other facilities.

All six professional nurses also said that they were able to apply the knowledge and skills they acquired in class into the workplace. They gave the same information as the doctors. Nurse 2 summed it up by saying that:

the national guidelines were useful as they assisted me to transfer the knowledge and skills into practice.

4.4 Suggestions for Enhancing or Improving the Future ART Training

4.4.1 Suggestions for Inclusion to the Training Programme

The six doctors were asked to provide the suggestions they could include to improve the initial CCMT training programme.

Three of the doctors (Doctor 1, 3 and 5) raised the issue of the training duration. Doctor 1 said that:

doctors training should be at least three days.

Doctor 1 concluded by saying that long training programmes are time-consuming and there is shortage of doctors to relieve each other when one is gone for training and patients turn up in high numbers.

Two of the doctors (Doctor 3 and 5) who also raised the issue of training duration had different views to Doctor 1. Both suggested that the course duration should be increased from 5 days to 10 days because there was too much information on the course. Doctor 5 summed up by saying:

have more than 5 days as the content is congested and the training course has more theory than clinical practice to at least 10 days.

Three of the doctors (Doctor 2, 5, and 6) raised the issue of the course content. Doctor 2 suggested that the course content for the doctors, if the duration is longer,

the content should at least be challenging and more intense with drug interaction content and more on how to manage the patients with side effects. Doctor 2 added by saying:

the content should focus more on ARV roll out which is clinical practice than the setting up of the ARV clinic.

Doctor 5 supported Doctor 2 as he said that:

the content should have more clinical practical content on ARV than information to set up ARV clinics for doctors ,and to include new drug regimen and developments as they are improved.

Doctor 6 also proposed that the content should be more on ARV as the doctors are expected to be clinical experts.

Two of the doctors (Doctor 1 and 2) raised the issue of group composition and size. They proposed that doctors should not be mixed with other healthcare professionals in the same course. Doctor 2 proposed a training condition that a mixed group of the same occupational category should be trained in one group, or at least a mixed group of healthcare professionals should be doctors mixed with more experienced professional nurses only.

Doctor 2 also proposed that the group size should be between two and five.

Four of the doctors (Doctor 2, 3, 4 and 6) proposed an alternative training strategy. Their proposal was that the training strategy for the course should be more clinically based. Doctor 3 summed up by saying that the course should be a clinical based training with one learner allocated to one mentor and use a workbook with real cases that should be consulted examined and managed in real clinical practice that is more focused on clinical practice than lectures. Doctor 6 explained the concept of clinical practice by saying that:

the training methodology should be more practical e.g. have real X-rays to view and interpreted during case studies.

Only one doctor of the six doctors raised the issue of the group portfolio. Doctor 3 suggested that there was no need for group portfolios.

Five of the nurses suggested that the training duration should be increased. Nurse 1 said it this way:

I found that there was too much information to be taught in five days it will be best if the course can be extended to ten days.

Nurse 2 provided a similar response by saying:

the content was too much to be covered in five days I would suggest at least ten days.

Nurse 4 added by suggesting that:

more than five days is needed due to too much content, at least ten days to allow thorough case discussions in the groups without rushing.

Three of the nurses (1, 2, and 4) raised the issue of course content. All three said that the training content was good. Nurse 2 summed up by saying that:

the content was okay as I did not know much as a newly qualified professional nurse.

When asked to clarify what “okay” meant, the Nurse 2 said that the course content had all the information that was needed to provide a new healthcare professional with knowledge and skills to treat and care for the HIV and AIDS patients in real practice.

Nurse 3 expressed a different view about the content and said that:

information on demographics was not relevant and not adding value to the clinical part of the management of the clients in relation to diagnosing, treatment and care.

Professional Nurse 3 concluded by suggesting that the content on demographics should be removed from the course content as it does not add value to the clinical management of the clients.

Professional Nurse 6 suggested that updates about new drug regimen must be included in the revised CCMT course.

The other issue raised was about the teaching strategies Nurse 2 suggested the individual questionnaire that is used to assess individual learner competency should be adapted to the field of work according to the profession specific qualification. It should not be too clinical based for other staff categories like social workers.

Two of the nurses (3 and 4) raised different negative views about the issue of the group portfolio. Nurse 3 said that:

the portfolio was too cramped.

When asked to clarify what it meant the nurse said the portfolio had too many activities which took time and it was too much to be finalised within a month. Nurse 4 said that portfolios waste time and other learners failed to arrive for the group meetings.

4.4.2 Suggestions to Transfer Knowledge and Skills

The six doctors were asked to provide the suggestions they perceive could be the best way to assist the healthcare professionals to transfer the knowledge and skills into the workplace.

Four of the doctors (Doctor 2, 4, 5 and 6) raised the issue of the workbooks and mentors as approaches that can best assist the healthcare professionals to transfer knowledge and skills into the workplace. Doctor 2, 4, 5 and 6 also suggested that learners should have mentors. Doctor 4 and 5 proposed the use of workbooks for individual completion with a mentor to supervise the learner in a clinical work environment to examine cases. Doctor 4 summed up by saying:

use of workbooks for individual completion with a mentor.

Doctor 5 concluded by saying that:

to have workbooks for case studies to manage under the supervision of a mentor in the workplace.

Doctor 6 concluded and said that:

to have dedicated mentors at least one for each sub-district will help to assist with transfer of learning; unlike having none and only relying on the other team members whom you are not even sure that they are competent more than yourself.

The six nurses provided the following responses on how could the healthcare professionals be best assisted to transfer the knowledge and skills into the workplace.

Two of the nurses (3 and 4) proposed the issue of having mentors and workbooks in the work environment. Nurse 4 summed up by saying that:

having dedicated mentors at least in the district with workbooks to complete after training.

Two of the nurses (5 and 6) proposed issues about the future of the CCMT training programme. They both felt that the GDoH should continue to train the healthcare professionals on the CCMT training programme as the foundation course. Nurse 6 summed it up by saying:

CCMT should continue to train all newly qualified as the basic information can help to understand the information on advanced HIV training courses like Nurse Initiated and Managed ART (NIMART).

Nurses (1 and 2) suggested a sustainability strategy for the implementation of the CCMT training programme. Nurse 2 said that the training programme should be marketed to their managers so that they can have knowledge and support the learners by releasing them to attend the group portfolio meetings. Nurse 2 summed up by saying that all the managers should be trained on CCMT. Nurse 1 added by saying that all the healthcare professionals should be trained on the CCMT training to ensure adequate personnel to render the ART services.

4.5 Conclusion

The doctors and professional nurses felt that the content was useful, even though some of the doctors highlighted that the content was not clinical enough. The

majority of the participants felt that the course provided them with the skills and knowledge they needed to rollout the ARV programme. The majority of the doctors and nurses felt that the case study teaching strategy was best. Two doctors did not prefer the teaching approach of having a multidisciplinary group in the same course, however, the majority preferred it. The issue of group portfolio, workbooks and mentors was also raised. The challenges of office space, staff shortages were raised too. The improvements suggested were about the training duration, content and training strategies. All the issues raised are analysed in the Chapter 5.

CHAPTER 5: ANALYSIS OF FINDINGS

5.1 Introduction

In this section, the researcher analysed the data presented in Chapter Four in order to interpret the information gathered from the interviewed participants. The data have been analysed according to four themes. The perceptions of trained healthcare professionals about the training approaches, the perceptions about the training content, the perceptions about transfer of knowledge and skills into the workplace and suggestions for improvements.

5.2 Perceptions about the Training Approaches

Both the doctors and professional nurses said that the main training approaches used were lectures and case study discussions. The majority of the participants are pleased with the training approaches and they found the lectures and case study methods to be effective. However, there were some concerns about the group portfolio as a training strategy. The different training approaches are dealt with separately to highlight the concerns.

5.2.1 Case studies

The majority of the participants cited classroom case studies as the most preferred and effective training strategy. The case studies are seen as a strategy to facilitate sharing of knowledge and work experience to solve cases in the real work environment.

A classroom case study method was the teaching strategy most preferred by the participants. Grossman (1994) said that the case study method is able to provide structures that are conducive to creating dialogue, however he cautioned that discussions sometimes degenerate into directionless or meaningless debate in which facts are wrong. The case studies for the CCMT were monitored by the facilitators during classroom discussion in order to avoid meaningless debates.

The case study teaching approach was seen in two different ways by the doctors who participated in this study. The case study method where classroom discussions are held was used for the CCMT training programme. The doctors felt that there was a need for a different case study teaching strategy in which theory and practice are

integrated. This proposed approach was intended to allow doctors to see real patients in a clinical practice in the workplace and discuss these real life cases later with their peers for teaching purposes.

5.2.2 Group portfolios

The group portfolio was used as a group competency assessment for the CCMT training project. Five of the twelve participants raised concerns about the group portfolio as a training strategy. Two of the five respondents (Doctors 1 & 2) liked the group portfolio as a training strategy. They both felt that group portfolio was a very good teaching method. Doctor 2 felt that it was so good that he was able to notice how the ARV clinic was managed and identified the pitfalls, for example, shortages of staff in the ARV clinics.

Three of the five respondents disliked the group portfolio. Doctor 3 cited that it was complicated as it was not a suitable training strategy for clinical practice for doctors. Nurse 3, who also disliked the group portfolio, said that it was too cramped with too many activities to be completed within a month. Nurse 4 felt that group portfolio was waste of time as some of the learners failed to arrive for the scheduled group working meetings.

The majority of the participants considered the group portfolio assessment project to be relevant as a teaching strategy for the CCMT training programme. Another important factor that was suggested as a training strategy that could assist healthcare professionals to transfer knowledge and skills to the workplace was the suggestion of using individual workbooks with dedicated mentors in the workplace. In terms of using the portfolio as a teaching strategy or assessment tool, it was found that the intention or objectives of the group portfolio was understood by the majority of the research participants. The intention and objectives for the group portfolio used for the CCMT training programme was clear to the learners and the training provider and thus their like or dislike of it may have been a matter of personal preference in learning styles.

5.2.3 Group Composition

The group composition for the CCMT training programme for healthcare professionals was raised as a concern in terms of having the multidisciplinary team in one class; this was considered to be problematic for one of the participants. One doctor of the twelve participants felt that doctors should be trained alone. The assumption was that the doctor was probably more work orientated as he also commented that the course could be reduced to three days only for doctors. The same doctor felt that there was shortage of doctors available to relieve each other when one is gone for training and patients turn up in high numbers. Doctor 2 who was also not keen to have a multidisciplinary team, felt that it was fruitless to have inexperienced staff categories in a group discussion at least it will be better to have experienced professional nurses in one class with doctors. Despite this voice of protest, the majority of the respondents felt that to have a multidisciplinary health team trained in one class was positive and it promoted sharing of different work experiences and information from experts in a similar field but from different contexts.

5.3 Perceptions about the Training Content

5.3.1 The content in the CCMT training programme that was found to be useful

All participants felt that the main key topics that are useful for the CCMT training programme are: Diagnosing of patients using the World Health Organisation (WHO) staging; drug regimen; the ARVs; management of opportunistic infections (OIs) and side effects; Information on Adherence Counselling. The reviewed three HIV and AIDS care training programmes for Botswana, Washington and Makerere University in this study cited the same topics as useful.

5.3.2 The content in the CCMT training programme that was found not useful

Doctor 1 and Nurse 3 of the twelve participants cited the content on demographics as being not relevant for the clinical skills training programme. The reason being that the CCMT course should have focused only on clinical practical issues rather than population issues. The majority of the doctors cited the lack of clinical practical

exposure and a lack of integration of theory and practice as a concern and weakness as it was not included as a teaching strategy for the CCMT course.

The majority of the respondents found the CCMT training content very useful to have provided them with knowledge and skills to render ART services.

5.4 Perceptions about Transfer of Knowledge and Skills into the Workplace

Seven participants, of whom four were doctors and three professional nurses, said they did not experience any challenges in transferring learning from the classroom into the real work environment.

On the other hand, five participants experienced challenges during transfer of learning into the workplace. The challenges they identified were: infrastructure, shortage of staff and lack of practical integration with theory during content teaching. Ojikutu (2007) in his research report highlighted similar issues cited by the participants in that study. The lack of well provisioned infrastructure, functional laboratory services and inadequate trained healthcare workers and managers were challenges that hindered transfer of knowledge and skills. Sow, (*et al.*, 2007) also indicated that limited resources could hinder the implementation of ART rollout. Jaffar, (*et al.*, 2005) also cited issues like poor resources in that these can contribute to poor ART rollout in the workplace, and concluded that the models of delivering the ART services do play a role in the success of implementation of the ART programme.

Despite this, none learners said that these challenges had hindered their transfer of knowledge and skills into the workplace, when asked. The conclusion is that the healthcare professionals in this study successfully managed to transfer learning into the real workplace environment.

5.4.1 The knowledge and skills acquired to do the job post-training.

The majority of doctors and all six professional nurses confirmed that they have acquired the skills and knowledge, and they are currently using the skills and

knowledge effectively in their workplace. They reported that they are able to diagnose patients through staging, prescribe the correct treatment by referring to the protocol on the treatment regimen; they are able to manage and treat opportunistic infections for example, pneumonia and the unpleasant side effects caused by the drugs.

5.4.2 Application approaches of the knowledge and skills acquired

All participants said that they are currently able to apply the knowledge and skills into the workplace. The self-reporting by participants was the only measure used in this study to determine transfer and ability to use the knowledge and skills acquired by participants. The participants reported that they used the HIV and AIDS national guidelines and the course pack that was used in class for references and case management in the workplace. Some of the participants discussed cases with other doctors or team members at their clinics. The participants reported a positive change in their skills and knowledge in the workplace. McCathy, (*et al.*, 2006) indicate in their research report that training a robust health workforce is critical for sustainable HIV treatment programmes. The analysis showed that without a quality and effective training programme it would be impossible to empower healthcare professionals with the necessary skills and knowledge to render ART services. Therefore, the GDoH CCMT training programme used to train healthcare professionals has managed to empower them with the knowledge and skills and hence they feel able to rollout the ART services in Gauteng.

5.5 Suggestions for Improvements

The suggestions proposed for the improvement of the initial CCMT training programme were around the issues of training content, teaching strategies, course duration, target group and future of the CCMT training programme which will be elaborated upon in the following section.

5.5.1 Training content

The majority of the doctors suggested that the course content should focus more on clinical practice than theory. All of the professional nurses said that the course content is good, however, some did not see the relevance of the content on demography for the clinical management of clients. The suggestion was that the department should continue to train new qualified nurses, and include updates on drug information in the CCMT training programme. The CCMT training programme could be used as a foundation course for all other ART advanced courses for example, Nurse Initiated and Managed ART (NIMART).

5.5.2 Training strategies

The majority of doctors expressed that the training strategy for the course should be clinically based with focus on case management using a workbook with a mentor in the workplace.

There was a suggestion that the individual questionnaire used for competency assessment needed to be revised and be customised according to the work expertise of each staff category in order to be a fair and just assessment tool to test for knowledge and skills acquired by the healthcare professional during training.

5.5.2.1 Course Duration

The majority raised the issue of course duration as a concern. The participants felt that the training content was congested into five days. It was suggested that the training days should be increased from five days to at least ten days.

5.5.2.2 Group Composition

The issue of group composition was raised as a concern by only two doctors who suggested that doctors should be trained alone even though other doctors preferred only experienced nurses being trained with the doctors. However, the majority of the participants suggested that the training target group should include all healthcare professionals as they share knowledge and experiences. The number per group was suggested as between 2–5 learners for group discussions.

5.5.3 Transfer of the knowledge and skills to the workplace

The doctors and professional nurses raised the same responses. The majority expressed the view that dedicated mentors would assist to transfer knowledge and skills in the workplace. The other issue raised was that the CCMT training programme should be marketed and all the facility managers and clinic staff should be trained so that all personnel could be able to render a comprehensive healthcare service, including the ART service, to patients.

5.6 Conclusion

The GDoH CCMT training programme has managed to provide healthcare professionals with the necessary skills and knowledge to render ART services. It was encouraging to find out that the GDoH CCMT training curriculum has almost the same training content as the HIV and AIDS care and treatment training programmes of other three selected countries like Botswana, Washington and Makerere University at Uganda. The case study method was confirmed in this study as the most preferred training strategy of the participants. The majority of participants perceived the group portfolio training strategy to be a relevant training strategy for the CCMT course. The majority of doctors seem to prefer training that is focused on clinical skills using the real patients in the real work environment. The use of the workbook for practical competency assessment under the supervision of the mentor was appreciated and recognised by doctors as their preferred training approach. The same training strategy of using workbooks with dedicated mentors seems to be preferred by the majority of the professional nurses too.

There were several challenges encountered in the implementation by a minority, but these participants managed to transfer the skills and knowledge into the workplace. The participants seemed to agree that the training duration for the training contact session should be increased from five days to at least ten days. The majority of the participants seemed to prefer a mixed group of healthcare professionals in the same training course. The availability of the national HIV and AIDS guidelines is imperative to assist the participants with application of skills and knowledge into the workplace.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This section provides a conclusion and the recommendations that will be submitted to the GDoH for consideration to improve the future training policies and training strategies for the HIV and AIDS programmes. The information emanated from the data findings and analysis in Chapter Four and Five. The conclusion and recommendations are reported with a focus on the three main research questions. The research questions were the perceptions of trained healthcare professionals about the quality and effectiveness of the CCMT training programme, the challenges encountered by the healthcare professionals during transfer of learning from classroom into real working environment post training and the suggestions for enhancing or improving future ART training programmes.

6.2 The perceptions of trained healthcare professionals about the quality and effectiveness of the CCMT training programme

The Gauteng CCMT training programme is in line with the international standards set out for the training content for the curriculum for the basic HIV and AIDS care and treatment training programme for healthcare professionals. The training strategies used for the CCMT training programme are similar to the basic teaching strategies that are used widely, which are lectures, case studies and portfolio assessment. The majority of the doctors consider integration of theory and clinical practice as or to be the most effective training approach. The healthcare professionals reported that they managed to acquire the expected knowledge and skills from the course and they are able to provide quality ART services. The main suggestions were that the theory should be integrated with practice and the GDoH should continue to train healthcare professionals using the same programme but update the drug content.

It is recommended that the theory and practice integrated training strategy should be added as a new training approach in the course.

Participants suggested that the training programme should continue and the training content must be reviewed and updated frequently when new policies are enacted on issues of HIV and AIDS.

6.3 The challenges encountered by the healthcare professionals during transfer of learning from classroom into real working environment after training

The challenges that were reported were: staff shortages, inadequate infrastructure and the inadequate trained healthcare professionals to render the ART services.

It is recommended that in future before implementation of any national strategic key project the GDOH should ensure that all the relevant resources needed for project are acquired and put in place.

6.4 Suggestions for enhancing or improving the future ART training programmes.

The course duration was too short therefore there is a need to increase the training days from five to ten days. The majority of the doctors preferred a teaching approach in which theory and clinical practice are integrated. The doctors suggested practical case management in the workplace as a teaching strategy that should be included for the CCMT training programme. The majority of the participants expressed the need to use the workbook with cases and having dedicated mentors as the preferred teaching approach.

Professional nurse 2 felt that the individual questionnaire that was used to assess competency of learners was biased and was not adapted to test the expected knowledge and skills for a professional specific health category. The other suggestion was that the GDoH should market the CCMT training programme and the department should continue to train the new healthcare professionals as a foundation course for all advanced ART training courses. The multidisciplinary team

should be trained in the same class to promote sharing of work experiences by different health professions.

Recommendations are that the training duration for the CCMT training programme should be increased to ten days.

The GDOH should create posts for dedicated mentors to work in the districts. The learners should be placed in a workplace where there are trained mentors in the facility who will supervise and ensure that each learner has managed to consult, care and managed the various cases stipulated in the practical workbook to enable a learner to be declared competent. The other option could be that the GDoH could employ the team of mentors who are based in the provincial office, who could rotate within the province to all the facilities twice per week where trained personnel are working to ensure that all the stipulated cases in the workbook are consulted, and the workbooks are accurately completed by learners.

The GDOH should continue training all multidisciplinary healthcare teams in the same class and the CCMT course should be marketed to all different levels of healthcare providers, including the facility managers.

The individual competency test questionnaire that is able to test knowledge and skills of the healthcare professionals which is relevant to their scope of practice should be developed.

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APPENDIXES

APPENDIX 1: THE CONTENT LAYOUT FOR THE GDOH CCMT TRAINING PROGRAMME

Broad Learning Outcomes

Module 1 (1 day)

Sound knowledge and understanding of the Comprehensive HIV and AIDS Care Management and Treatment (CCMT) Programme and the National HIV and AIDS Care Strategy. The learner must be able to execute and apply the clinical practice standards consistent with the National Policies, Protocols, Procedures and Guidelines.

Module 2 (1 day)

Disease management programme through all the stages of the disease according to the World Health Organisation (WHO). The HIV Counselling and testing experiential learning course.

Module 3 (1 day)

Systems Management including referral systems, core package of services, financial management, human resource management, logistics, procurement, programme management, quality assurance and laboratory system.

Module 4 (1 day)

Attitude and behaviour change management within the Comprehensive HIV and AIDS Care Management and Treatment Programme.

Module 5 (1 day)

Clinical Practice – Planned Portfolio – Assignment.

Specific Learning Outcomes

Knowledge in - Epidemiology of HIV and AIDS, Risk factors for transmission, Demographics and Basic Science.

Clinical management - Diagnosis of HIV infection, physical examination by stage of the disease, including recognition of primary infection syndrome, skin manifestations of HIV by staging of the disease, health care maintenance for HIV+ patients including immunizations, diagnosis and treatment of common opportunistic infections (OIs), Sexual Transmission Infections (STIs), prophylaxis, diagnosis and treatment of TB in

HIV+ patient. Clinical indications for starting, switching Anti Retroviral Therapy (ARVs), appropriate clinical monitoring adherence issues for health care team – physicians, nurse etc.

Signs and symptoms to be alert for, requiring consultation/referral with expert clinician/physician. Prevention issues for the infected population, prevention counselling,

Nutritional status assessment, Education and referral, Screening for ARV's eligibility, Mother to Child Transmission (MTCT) and its prevention. Counseling and support. Pharmacy controls, Information management. Overview of anti-retroviral therapies including indications for Highly Active Antiretroviral Therapy (HAART). Prenatal and postnatal prevention of HIV transmission, Care of paediatric patients, HIV disease in women, Special populations – psychosocial issues, prevention issues. Health care maintenance for HIV+ persons, health education and wellness promotion. Understanding and interpreting common laboratory tests.

Overview of Anti-Retroviral Therapy (ART)

Principles related to ART's, monitoring the patient on ARVs, schedule and importance of routine follow-up. Drug class considerations, class-sparing regimens, Side effects and management of side effects. Drug choice: naïve patients, Drug interactions: HIV – related drug failures, TB and other drug interactions, non-prescription drug interactions.

Clinical failures, virology failures. Poor compliance: clinical strategies to improve adherence, Drug resistance: clinical picture and resistance testing.

Skills in - Clinical assessment, counselling, referral systems, communication, laboratory monitoring, data management, analysis interpretation, reporting and use of data in management. Care of the dying patient, palliative care, working with care-givers/families.

Attitude in relation to - Awareness, values and ethics, peer review process, stigmatization as a barrier to care, confidentiality and disclosure.

Behaviour in terms of - Elements of behaviour change, demonstrated commitment, responsibility, teams driven dynamics Adapted from the (CCMT Plan for SA, 2003: 112-114).

APPENDIX 2

Four Priority Areas for the HIV/AIDS & STDs Strategic Plan for South Africa (2000-2005)

PRIORITIES AREAS	GOALS
PRIORITY 1 : Prevention	Goal 1: Promote Safe and Healthy sexual behaviour
	Goal 2: Improve the Management and Controls of STDs
	Goal 3: Reduce Mother-to Child Transmission
	Goal 4: Address Issues Relating to Blood Transfusion and HIV
	Goal 5: Provide Appropriate Post-Exposure Services
	Goal 6: Voluntary HIV Testing and Counselling
PRIORITY 2 : Treatment Care and Support	Goal 1: Provide Treatment Care and Support in Health Facilities
	Goal 2: Provide Adequate Treatment Care and Support in Communities
	Goal 3: Develop and Expand the Provision of Care to Children and Orphans
PRIORITY 3 : Research Monitoring and Surveillance	Goal 1: Ensure Vaccine Development
	Goal 2: Investigate Treatment and Care Options
	Goal 3: Conduct Policy Research
	Goal 4: Conduct Regular Surveillance
Priority 4 : Human and legal Rights	Goal 1: Create an Appropriate Social Environment
	Goal 2: Development an Appropriate Legal and Policy Environment

Adapted from the NSP 2000-2005: 13-14

APPENDIX 3

THE STRENGTHS AND CONSTRAINTS OF THE HIV/AIDS STRATEGY DEVELOPED BY NACOSA 1992, REVIEWED 1997 (NSP 2000-2005).

THE STRENGTHS IDENTIFIED

(i) High level of commitment from the Health Ministry, (ii) the collaboration initiated by the Department of Health (DOH) at various levels to ensure an interdepartmental and inter-sectoral response, (iii) Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) have been highly motivated and active although operating with limited resources, (iv) adequate drug supply and accessibility for Sexual Transmitted Diseases (STDs) management was good in most clinics and (v) there was improvements in Tuberculosis (TB) services.

THE CONSTRAINTS IDENTIFIED

(i) Major restructuring of national and provincial departments has delayed the appointments of personnel, (ii) limited human and financial resources at all levels, (iii) non establishment of district structures, (iv) lack of structured referral systems continuity of care home based care and terminal care facilities, (v) lack of integration of STD & HIV/AIDS and TB care, (vi) lack of visible commitment outside the DOH to effect the interdepartmental implementation of the programme, (vii) continued high levels of discrimination and human rights abuses of people affected by and infected with HIV/AIDS, (viii) lack of provincial policies, guidelines or management protocols for comprehensive care and counselling and (ix) non-availability of health promotion materials in the vernacular (NSP 2000-2005:5-6).

APPENDIX 4

LIST OF THE STAKEHOLDERS INVOLVED IN THE DEVELOPMENT OF THE NSP 2000-2005

The stakeholders involved in the development of the strategic plan were:

- representatives of faith based organizations (FBOs),
- people living with HIV infection and AIDS (PWAs),
- human rights organisations, academic institutions
- the civil military alliance (CMA),
- the Salvation Army
- the media,
- organised labour,
- sports,
- business,
- insurance companies,
- women's,
- youth,
- international donor organisations,
- health professionals and health consulting organisations,
- political parties,
- and relevant government departments.

(NSP 2000-2005).

APPENDIX 5: INTERVIEW CONSENT FORM

University of the Witwatersrand

Graduate School of Public and Development Management (P&DM)

I _____ agree to participate in the research study
and I agree to be interviewed on the following basis:-

- That my participation is voluntarily and I can withdraw at any time;
- That by participating in this research I will not be exposed to any risk;
- That my identity will remain anonymous, the recording of my participation will not reveal my identity therefore will be confidential and
- I understand that the record of my participation will be made available for my inspection if I request for it.

Signature of participant: _____

Date: _____

Place: _____

APPENDIX 6: BACKGROUND INFORMATION FOR MEDICAL OFFICERS AND PROFESSIONAL NURSES

University of the Witwatersrand

Graduate School of Public and Development Management (P&DM)

I am Nkhesane Agnes Suping a Master's student at the Graduate School of Public and Development Management in the University of Witwatersrand. I am conducting a research study on the Comprehensive HIV and AIDS, Care, Management and Treatment Training Programme (CCMT). The research study seeks to explore the learning experiences and challenges that healthcare professionals encountered during the process of transferring learning into the real working environment.

The HIV and AIDS epidemic is the most important challenge facing South Africa today. The Government is faced with the challenge of coming up with new strategies to address the HIV and AIDS pandemic. Training and development of healthcare professionals is a key imperative in this endeavour. Various Training and Development Programmes have been developed for this cause. The CCMT Training Programme being one of the programmes to address the challenge of the epidemic.

The research study information will assist the Gauteng Department of Health and Social Development (GDHSD) to make an informed decision about the future developments in relation to the CCMT training programme.

The research study is the requirement of the Master's degree. It will be appreciated if you could assist me in this study. Your participation is voluntarily, if you wish to withdraw at anytime you are welcome. The participation will involve answering of questions through an interview. A digital voice recorder will be used in order to ensure that accurate information is not lost and correct information is used for the reporting of the results. The process will take approximately 1-2 hours.

Your identity will be kept anonymous. The data will be kept until the research report is published, thereafter the data will be destroyed. If you agree to participate, will you please complete both consent forms for the interview and the digital voice recording. However you are allowed to decide not to be recorded if you do not feel comfortable.

APPENDIX 7: INTERVIEW QUESTIONS GUIDE

University of the Witwatersrand

Graduate School of Public and Development Management (P&DM)

- 1. What are the perceptions of the healthcare professionals who have been trained in the CCMT training programme about the quality and effectiveness of the CCMT training programme?**
 - 1.1. What content in the training programme did you find useful?
 - 1.2. What content did you find not useful?
 - 1.3. What knowledge and skills did you acquire from the content of the CCMT training programme to do your job now?
 - 1.4. How did you experience the instructional strategies used for the CCMT training programme. Can you tell me about them?
 - 1.5. What did you find useful or not useful about the instructional strategies?

- 2. What challenges have the healthcare professionals encountered during the transferring of learning from class into the real working environment post training?**
 - 2.1. What were the challenges you experienced with regard to transferring learning into the workplace?
 - 2.2. Tell me how you go about to applying the knowledge and skills that you acquired from the learning experience to this workplace. Can you give me examples?

- 3. What are the suggestions for enhancing or improving the future ART training programme?**
 - 3.1. Tell me about the suggestions that you could include to improve the CCMT training programme in terms of the initial training?
 - 3.2. What suggestions do you propose that could best assist the healthcare professionals to transfer the knowledge and skills to the workplace?

APPENDIX 8: INTERVIEW SCHEDULE

University of the Witwatersrand

Graduate School of Public and Development Management (P&DM)

Staff Category	Gender	Date of Interview	Time of Interview
Doctor 1	Male	31 Oct 2011	10:00
Doctor 2	Female	2 Nov 2011	10:00
Doctor 3	Female	14 Nov 2011	11:00
Doctor 4	Male	14 Nov 2011	13:00
Doctor 5	Male	15 Nov 2011	12:00
Doctor 6	Female	28 Nov 2011	13:30
Professional Nurse 1	Female	31 Oct 2011	18:00
Professional Nurse 2	Female	31 Oct 2011	14:30
Professional Nurse 3	Male	7 Nov 2011	15:00
Professional Nurse 4	Female	8 Nov 2011	18:00
Professional Nurse 5	Female	15 th Nov 2011	15:00
Professional Nurse 6	Female	15 th Nov 2011	16:15

APPENDIX 9: TRANSCRIBED RESPONSES FROM THE PARTICIPANTS

University of the Witwatersrand

Graduate School of Public and Development Management (P&DM)

Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 1 Date interviewed 31 October 2011	Doctor	Diagnosing, screening and ART information was useful. (A) Lot of information was not relevant for doctors e.g. Demographics. (B) Knowledge and skills acquired from the content to do my job was mainly diagnosis through staging, treatment and management of opportunistic infections and importance of treatment compliance. (C) The instructional strategies were all useful i.e. lecture, case studies which helped to assimilate the actual situation. (D) The portfolio was	There were no challenges. (A) Resources in terms of drugs and national guidelines were available to assist to do the work in practice. The national guidelines are very helpful to apply knowledge and skills. (B)	Doctors training should be at least 3 three days and they should not be trained with other healthcare professionals as some of the content is not relevant and not suitable for doctors. (A) Doctors training should be on the content relevant to support them to perform their actual daily practical work according to where they are based. (B) Long training programmes are time consuming due to shortage of doctors to relieve each other when one is gone for training and patients are many. (C) Test could be limited to a class test after lectures to save time. (D)

		very good as a teaching method. (E)		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 2 Date interviewed 02 November 2011	Doctor	Everything in the file and all the notes were very useful – Issues around WHO Staging to diagnose and the ARV Regimens. Content focus was not clinical enough or advance enough for doctors Information on setting up the ARV Clinic was not relevant to a practitioner. The course did not equip practitioners/people to go and start the ARV roll out. I understood the ARV roll out system. Good power points presentations and group discussions.	No challenges I use the course file and national guidelines as reference to apply knowledge and skills.	Content more focus on ARV roll out Longer courses that are challenging for doctors with intense drug interaction and how to manage that. Same occupational groupings at least doctors with more experienced professional nurses. Smaller groups 1 – 5 Having mentors

		Group discussions were useful but mixed group was a challenge as a doctor you will be conversing with people who had little or no clinical experience at all. The portfolio was good it gave me insight on how the ARV clinics are run and also their pitfalls like shortage of staff.		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 3 Date interviewed 14 November 2011	Doctor	The WHO staging for diagnosis, the Drug Regimens, Adherence and compliance information to prevent drug resistance, management of the opportunistic infections (OIs) and side effects was useful. None was not useful, too much theory than clinical practice in real	Lack of practical experience during teaching of content hindered transfer of knowledge post training which was long after theory contact sessions. Doctor 3 elaborated by saying that “for doctors to learn a clinical skill better it is best to teach them content in class and allocate a mentor in the real workplace so that	To have a course as a clinical based training with one to one with mentors and a workbook to manage real cases in practice. More clinical practice than lectures Increase number of days from 5 to 10 days as there was too much information. No need for the portfolio

		work environment. Knowledge and skills acquired to do the job is diagnosing, management of the side effects and OIs and prescribing the correct drug regimen. The instructional strategies – too much theory not good. Group discussions for case studies were helpful. It was okay to have the multidisciplinary team, not a big deal. Portfolio was complicated as it was not clinical practice for doctors.	from the class session they go directly to the practical environment the same day to implement the theory into practice the CCMT training lacked that integration Using national guidelines and course pack and discussing cases with colleagues help with application to the workplace.	
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 4 Date interviewed 14 November	Doctor	Adherence counselling, different types of drug regimen, management of side effects, diagnosing of	Transferring of learning into workplace was a challenge as the course did not teach enough clinical issues for doctors.	Content on clinical practice for doctors should be upgraded. Use of workbook for individual completion with a mentor.

2011		clients using WHO staging was useful content All content was useful though the content did not cover extensive clinical aspects for doctors. Adherence counselling skills, wholistic management of patients biological, social and psychosocial, diagnosing using WHO, management of side effects and OIs. Lecturing, group work discussion of case studies was all good. Group work was useful to share knowledge and experience.	National guidelines and course pack helped with application of knowledge and skills. Discussing cases with other doctors in other facilities.	
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 5 Date interviewed	Doctor	Diagnosing using WHO staging, Drug regimen, management of OIs and side	There were no challenges, staff and drugs are available.	To include new drug regimens and developments as they are improved.

15 November 2011		effects, information on adherence was useful. No content was not useful I acquired the knowledge and skill to diagnose, prescribe the correct treatment, treat OIs and manage side effects. Skill to treat patients wholistically. Lecturers, case studies in group discussions were okay. Group work discussion was okay with different categories like pharmacists contributed with their field work expertise. Very useful to have the team in one training.	I used national guidelines and also refer to the course pack.	To have more clinical practical content on ARVs than information to set up ARV clinics for doctors. To have more than 5 days as the content was congested as training course has more theory than clinical practice to at least 10 days. To have workbooks for case studies to manage under the supervision of a mentor.
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 6	Doctor	Diagnosing using WHO staging, drug	No challenge as the ART clinic was fully	Training methodology should be more practical

Date interviewed 28 November 2011		regimens, information about adherence, disease profile, management of side effects and OIs was useful. Everything was useful. I acquired the knowledge and skills to diagnose, prescribe treatment, manage OIs and switch within drug regimens. Group work and case studies was good as it allowed sharing knowledge from workplace experience.	established with all resources like staff, furniture and infrastructure and drugs available.	e.g. have real X-rays to view and interpret during case studies. More on ARVs as doctors are expected to be clinical experts. To have dedicated mentors at least one for each sub-district.
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 1 Date interviewed 31 October 2011	Professional Nurse	Diagnosing patients using WHO staging, the ART regimens and information about compliance was useful. There was no content that was not useful.	The challenge was that learning was not transferred immediately into practice due to lack of space to start the ART service. One consulting room is used for primary healthcare service until	There is nothing I can include to the training programme, the content is good. I found that there was too much information to be taught in five days. It will be best if the course can be extended

		The knowledge and skills acquired was to diagnose and provide ART according to the regimens and management of opportunistic infections using guidelines. The instructional strategies used were interesting, it was a lecture facilitated by the facilitator and case studies discussed in groups. Group work to discuss the case studies was useful as the groups were made up of mixed staff categories that had different skills and experience in their respective field. The different health sciences composition was useful to the group as the case studies were viewed holistically with information from various perspectives. What was not useful is when the facilitator failed to	12:00pm daily in order to accommodate the ART service which starts from 12:00pm. There ART drug cupboard is kept in the same room with all other PHC drugs which is not really safe as all staff members in the clinic do access the key to the room. I apply the knowledge and skills to my work by using the national guidelines to diagnose and manage the patients on ARTs.	to 10 days. To assist the healthcare professional to transfer learning can be best if all the professional nurses are trained in the CCMT training in order to have all the rooms offer the ARTs rather than to wait for 12:00 to have the ART service.
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		engage the group and just lectured without learners actively participating.		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 2 Date interviewed 31 October 2011	Professional Nurse	Diagnosing using WHO stages and the treatment part – the regimens was useful All content was useful as I was a new trained professional nurse. The knowledge and skills acquired was to diagnose the clients using the WHO stages. Initiating the ARTs and teaching families on ART compliance The instructional strategies used were good. It was a lecture, group work to discuss the case studies. The group work to discuss the case studies was useful as the groups were made up of mixed	I did not have challenges as there were already other trained professional nurses in the hospital. The national guidelines were useful to assist me to transfer the knowledge and skills into practice.	The content was okay as I did not know much as a newly qualified professional nurse. The content was too much to be covered in five (5) days I would suggest at least 10 days. The individual questionnaires should be customise to the field of work and not being too clinical based for social workers as they battled to answer the clinical questions as it is not their expertise. The CCMT should be marketed to the managers so that they should be in a position to give permission to the learners to attend portfolio completion meetings. Some learners dropped out as they were unable to attend the meetings set up for the portfolio compilations.

		staff categories that had different skills and experience in their respective field.		All the managers should be trained on CCMT to promote buy in and support for the junior trained professional nurses to implement the new skills in practice.
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 3 Date interviewed 07 November 2011	Professional Nurse	Management of OIs, Diagnosing using WHO stages, choosing the correct treatment regimen, adherence counselling was useful. Information on demographics was not useful. The knowledge and skills acquired was counselling, management of side effects caused by the ARVs. The lecturing, group discussions on case studies were all fine. Case studies were useful; group members helped with intervention	No challenges, worked at the ARV site which had complete staff, doctors, dietician, social workers and pharmacist. Office space was also okay. Guidelines were useful to help to refer to in applying the knowledge and skills at workplace.	5 days was not enough due to too much content at least 10 days. Information on demographics was not relevant, not adding value to the clinical part of the management of the clients re diagnosing, treatment and care. Portfolio was too cramped, Mentorship and individual workbooks to complete to be competent to manage clients. The CCMT training programme should continue as the basic course for newly qualified to empower them before other advanced HIV courses like Nurse Managed ART (NIMART) course.

		on different cases, mixed skills helped e.g. social workers with psychological issues and pharmacist with drug issues.		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 4 Date interviewed	Professional Nurse	Epidemiology, WHO staging, drug regimens when to use and when not to use and when to change within regimens, management of OIs and side effects. All content was useful Skill and knowledge acquired is to diagnose using WHO stages, management of side effects, adherence counselling skills. Facilitation of lectures and group work was fine as it promoted dialogue to gain clarity. Group work was	Space for counselling was not enough, shortage of staff with other team members resigning. Work load for nurses to do tasks for experts like social workers Using national guidelines and discussing cases with other staff members.	More than 5 days is needed due to too much content, at least 10 days to allow thorough case discussions in the groups without rushing. Content was fine. Having dedicated roving mentors at least in the district with workbooks to complete after training not portfolios as they waste time and group assignment is difficult to manage as others fail to pitch up to the group meeting.

		more useful with mixed groups of team to share expertise.		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 5 Date interviewed 15 November 2011	Professional Nurse	Setting up of the ARV site, Diagnosing using WHO stages, functions of various team members for positive patient, adherence counselling, drug regimens, management of side effects was useful. All information was relevant as it was a new course. The knowledge and skills acquired is to manage side effects using drugs, to manage OIs and adherence counselling for compliance Lecture facilitations and group work to discuss case studies.	Shortage of staff, no dietician, doctors rotating within different facilities. I use national guidelines to help apply the knowledge and skills; I also discuss challenging cases with other professional nurses or ask the doctor if he is around.	Continue with the CCMT for new qualified nurses as a foundation course to serve as a base for courses like NIMART. The same doctor to see the same patient for quality case management. 5days can be increased and CCMT and NIMART be integrated into one course for at least 7 – 10 days as these courses have the same content like Diagnosing using WHO staging, Drug Regimens and Adherence counselling. This can avoid repeating the same information and save time on releasing same staff and can help combat staff shortage.

		Group work was helpful with different experience and knowledge helped solve case studies. I did not like portfolio, some group members did not attend regular meetings, and delayed progress as there was a need to bring them on board.		
Participant	Staff Category	Question on perception on the content and instructional strategies	Question on challenges encountered during transfer of learning	Question on suggestions to improve the future ART training Programme
No: 6 Date interviewed 15 November 2011	Professional Nurse	Epidemiology, pathophysiology, drug regimens, WHO staging for diagnosing, management of side effects and OIs was useful. All content was useful. Knowledge and skills acquired is to assess the patient, identify the correct regimen, monitor and manage the side effects. Lectures using the	No challenges, staff was enough, space okay, drugs available. Using guidelines to help with application of knowledge and skills, discussing cases amongst the team.	Updates must be included in the course. CCMT should continue to train all newly qualified as the basic information can help to understand the information on advanced HIV training courses like NIMART.

		slides, group work discussing case studies. Case discussion was useful as the team shared insight.		
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