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DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF THE CHOICE ON TERMINATION OF PREGNANCY SERVICES IN PUBLIC HEALTH FACILITIES IN TSHWANE DISTRICT IN GAUTENG PROVINCE

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DECLARATION

I, Lillian Jabu Nkosi

declare that:

“DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF THE CHOICE ON TERMINATION OF PREGNANCY SERVICES IN PUBLIC HEALTH FACILITIES IN TSHWANE DISTRICT IN GAUTENG PROVINCE“

is my own work and that this work has not been submitted for any other degree at this or any other institution. All sources that I have used or quoted have been acknowledged by means of complete references

_______________________________________ _______________________

LJ NKOSI **DATE**

DEDICATION

This thesis is dedicated to:

- My late mother and father, Mrs Lerries Nomsa and Mr Lamech N'wamavanyisi Maluleke who strove to see me educated
- My beloved husband Mr Jacob Nkosi who passed away during literature review
- My sisters Lydia and Muriel and my brothers Charles and Edmund Maluleke who wished me well in my studies

Special gratitude goes to my daughter Hazel Frances and my sons Kennedy Maswatonk'e and Dalton Mlondolozi for the support they gave me during the study period. Thank you for the encouragement. You made it easy for me to continue.

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ABSTRACT

DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF THE CHOICE ON TERMINATION OF PREGNANCY SERVICES IN PUBLIC HEALTH FACILITIES IN TSHWANE DISTRICT IN GAUTENG PROVINCE

The development of guidelines to improve the quality of CTOP services in public health facilities remains very important in ensuring the continuous provision of quality CTOP services. The assessment of the quality of CTOP services in public health facilities has been seriously neglected. The objectives of the study were to assess, determine and evaluate the quality of CTOP services in public health facilities using the Donabedian model of quality care. The purpose of the study was to develop guidelines to improve the quality of CTOP services in public health facilities.

A quantitative, non-experimental, cross-sectional survey research design was used to achieve the objectives of the study. The study was conducted in two phases. During the first phase, the objectives of the study were to assess, determine and evaluate the quality of CTOP services in public health facilities using the Donabedian model of quality care. Quantitative data was collected from 104 participants comprising of facility and quality managers, registered professional nurses and midwives and the post-CTOP clients from the eight public health facilities involved in the study. Questionnaires were used to collect data. The findings confirmed the challenges experienced by healthcare professionals and clients in the CTOP clinics. The study revealed the inadequate infrastructural challenges, lack of ablution facilities, lack of rest rooms for clients post termination of pregnancy, lack of privacy, overcrowding of clients, clients not honoring follow up dates, lack of proper referral routes and repeat CTOP requests.

In the second phase, guidelines to improve the quality of CTOP services in public health facilities were developed based on the findings of phase one. Modified Delphi technique method was used to develop and refine the guidelines to improve the quality of CTOP services in public health facilities. Three rounds were used to finalize the guidelines by a panel of six experts involved in CTOP and reproductive health services. Further research using other models of quality care is recommended.

Keywords

Development, guidelines, CTOP, quality, improve, public health facilities.

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LIST OF ABBREVIATIONS

CHC	Community Health Centre
CTOP	Choice on Termination of Pregnancy
DoH	Department of Health
ICDP	International Conference on Population Development
HIV	Human Immunodeficiency Virus
MDG's	Millennium Development Goals
MVA	Manual Vacuum Aspiration
NDoH	National Department of Health
NDP	National Development Plan
NGO	Non Profit Organisations
NHMRC	National Health and Medical Research Council Act
SAHR	South African Human Rights
SANC	South African Nursing Council
SSA	Statistic South Africa
VCT	Voluntary Counselling and Testing
VMMC	Voluntary Medical Male Circumcision
WISN	Work Load Indicators of Staffing Norms
WHO	World Health Organization

CHAPTER 1

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The assessment of the quality of health services is important and it continues to be a debatable topic across national and international health services (Kim, Coenen & Hardiker 2010:1037). Quality service delivery and clients' health outcomes cannot be separated, therefore, the assessment of the quality of the choice on termination of pregnancy services is critical because the quality of health services in this health domain has received little attention in South Africa (Adindu 2010:31-36).

The vision of the South African National Department of Health (NDoH) is to ensure a long and healthy life for all South Africans through the provision of quality health services (National Department of Health South Africa 2011a:8). Public health services have expanded in the form of programmes to meet all the health needs of the population. The choice on termination of a pregnancy services in public health facilities is a health investment aimed at reducing maternal morbidity and mortality among women caused by illegal and unsafe methods of abortion (CTOP Act 1 of 2008).

The choice to terminate a pregnancy service is offered in designated public health facilities to all women residing in the Republic of South Africa (SA) who wish to terminate their pregnancies before and at 12 weeks. The Choice on Termination of Pregnancy (CTOP) Act (92 of 1996) makes provision for the termination of a pregnancy under certain conditions and specific criteria to include all women residing in South Africa. Having the choice to terminate a pregnancy is a free reproductive health service offered to all women with no fees attached as stipulated in the CTOP Act (92 of 1996). In accordance with this Act, the termination of a pregnancy service can be procured up

to 12 weeks gestation under sterile conditions by registered professional nurses and midwives who have undergone the prescribed training.

Females from the age of 12 are legally allowed to request a termination of their pregnancy from pregnancy services without the permission of their partners or parents (CTOP Act 92 of 1996, Naylor & O'Sullivan 2005:1, World Health Organization 2003:66).

Public health facilities are expected to provide quality termination of pregnancy services in line with the CTOP Act (92 of 1996). Quality is defined in many ways depending on what is to be assessed. For the purpose of this study the definition of Professor Avedis Donabedian of quality will be used. Donabedian defined quality in terms of structure, processes and outcomes of care asserting that quality is the reflection of the values and goals of the healthcare system. He proposed a model for assessing the quality of health services based on structure, processes and outcomes (Donabedian 2003:46-53) .

Structure refers to the environment in which care is rendered and includes the human and material resources in the said environment. Human resources are concerned with the staffing ratio per client and the staff's qualifications, knowledge and skills. Material resources denote the facility and the equipment for providing quality care. Organisational structure incorporates medical and nursing staff, supervision, policies and performance review (Donabedian 2003:46-53).

Processes refer to what is actually done in rendering care. The activities of the professionals in rendering care include the diagnosis, treatment, rehabilitation, education and preventive treatment. The model includes the activities of clients receiving care in process assessment. Areas of interest in the healthcare service such as barriers to achieving the set goal are noted in this model (Donabedian 2003:46-53).

Outcomes refer to the desired quality of the health service resulting from the processes and the effects of the structure. Changes in health status include the knowledge, behaviour and satisfaction the client received from the service provided. Outcomes are effects of the quality of care on the client's health and well-being as it reflects how

skilfully quality care was executed (Donabedian 2003:46-53). For these reasons, the three components of Donabedian's model of quality care will guide this study.

Quality care is a basic human right worldwide and an integral part of healthcare. The delivery of quality healthcare is non-negotiable in the public health facilities. Public health facilities should do frequent assessments to track the level of quality of their service delivery and strive to improve and satisfy their clients. Assessment of the quality of the CTOP needs to be done regularly to ensure improvement of the quality of this service.

1.2 BACKGROUND AND RATIONALE

Human rights focusing specifically on the rights of women and girls have been strongly emphasised in the International Conferences on Population Development (ICPDs) held over the years in different cities and countries: in Cairo in (1994), Canada in (2002), France (2004) and in Bangkok (2006). Two additional ICPD conferences were held subsequently in Addis Ababa in 2009 and in Turkey in 2012 (Roseman & Reichenbach 2010:403, Istanbul Statement of Commitment 2012:1).

The ICPDs recognised the importance of improving the quality of women's health by providing reproductive health rights. At the first four ICPD conferences, all governments agreed that the definition of reproductive health includes the choice on the termination of a pregnancy. The ICPDs' operational review would take place at national, regional and global levels in 2014 as mandated in these conferences to follow up on progress made regarding these issues (Bangkok Statement of Commitment 2006).

The World Health Organisation's (WHO) Millennium Development Goals (MDGs) adopted by all governments worldwide in 2002 aimed to improve health, promote gender equality and also pay more attention to reproductive health and women's rights (Ipas 2011). To achieve goal 5 of the MDGs, namely to decrease maternal mortality rates and achieve access to reproductive health by 2015, (Blaauw & Penn-Kekana 2010:4) it was necessary to legalise abortion in order to lower maternal morbidity and

mortality caused by unsafe and illegal methods of abortion. The South African Government was proactive to heed this call and passed the CTOP Act (92 of 1996) which was implemented in 1997. Termination of pregnancy is free but there are still women who engage in illegal methods to terminate an unwanted pregnancy.

The Constitution of the Republic of South Africa (Act 108 of 1996) laid the foundation to improve the quality of life of all citizens and free the potential of each person by creating an enabling framework in Chapter 2 of the Bill of Rights. The Constitution addresses various issues such as equality before the law, the right to freedom and security, religion, beliefs and opinions, the right to healthcare, water and social security including access to information (Act 108 of 1996: Sections 9, 12, 15, 27 & 36).

In South Africa, termination of pregnancy services by choice was implemented in 1997 following the passing of the CTOP Act (92 of 1996). Primary factor that led to its adoption and implementation included the expanded utilisation of professional nurses and the respect and promotion of women's right to life and well-being (Mhlanga 2003:115). Up until 1997 the Abortion and Sterilization Act (2 of 1975) had been implemented which made no provision for the inclusion of women's choice as far as terminating a pregnancy was concerned (Albertyn 2015:430). The Act was extremely restrictive and inaccessible particularly to Black, Indian and Coloured women. The then Ministry of Health designated private hospitals where only white women were assisted with an abortion, thus an abortion was not legally accessible by choice to all women in the country (Potgieter & Andrews 2004:21, Morroni, Buga & Myer 2006:37).

The CTOP Act, (92 of 1996) honoured South African women's human right to freedom and equality by providing all women the right to choose to terminate a pregnancy at appropriate health services on request. The promulgation of the South African Government's CTOP Act (92 of 1996) redressed the discriminatory and irregularities of the past to improve the quality of health among women living in this country. However, only doctors and registered midwives were allowed to procure CTOP services on implementation of the CTOP Act (92 of 1996). This became a challenge because not all doctors and registered midwives were willing to take part in the procurement of CTOP

which inevitably left a small number of professionals to carry out the mandate and making it difficult for them to deliver safe and quality care.

On realising this gap and its consequences relating to the reduction of maternal morbidity and mortality, the CTOP Act (1 of 2008) as an amendment of Section 1 of the CTOP Act (92 of 1996) was introduced. The CTOP Act (1 of 2008) allows for registered professional nurses who have undergone additional training in midwifery as prescribed in terms of this Act to procure CTOP in public health facilities which is in line with the South African Nursing Act (33 of 2005).

Cooper et al. (2004:75) observe that South African reproductive health policies and laws are among the most progressive and comprehensive in the world in terms of the recognition they afford to human rights, including sexual and reproductive rights. The CTOP Act (1 of 2008) allows a female from 12 years old to request a termination of a pregnancy without advancing reasons provided that the gestation is less than 12 weeks.

The termination of a pregnancy is allowed in other African countries but with certain and varied limitations in each country. In Zimbabwe, for example, the Termination of Pregnancy Act (29 of 1977) makes provision for abortion under limited circumstances. However, this is considered as restrictive to the reproductive rights of women. The termination of pregnancy which is not within the conditions allowed by the law is considered a criminal offence in Zimbabwe under the Act (29 of 1977) as well as the present Constitution and also the draft Constitution of January 2013 (Magidie & Goro 2013:9).

The fact that abortion in Lesotho is currently governed by the principles of the Roman-Dutch common law under which abortion is only considered to save a woman's life, maybe perceived by others as denying women their right to access abortion services. Religiously, Lesotho is a Christian country although the majority of the population is of the Roman Catholic faith. Abortion is therefore illegal in the country and the government supports family planning efforts (Lesotho Planned Parenthood Association (LPPA) Strategic Plan 2010-2014:103).

In Botswana, terminating a pregnancy is only allowed in circumstances where the mother's life is at stake and an abortion is the only option. In principle, procuring an abortion outside the set parameters is illegal and carries a maximum of three years' imprisonment (Smith 2013:12). Mogwe (cited in Smith 2013:29-30) states in Botswana complicated court processes are required for a woman to terminate a pregnancy even if it is the consequence of rape or incest.

Globally, all governments are obliged by their Constitutions to provide quality health services to the populations (WHO 2008:88). Improving women's lives is a priority in South Africa and is in line with the Constitution of the country. The NDoH is determined to fulfil the vision of the government and its entire people to assure a better life for all by providing quality health services including reproductive health services.

1.3 PROBLEM STATEMENT

The state of the quality of CTOP services in the Tshwane district in Gauteng, a province in South Africa is put forward as the premise which will be argued in this study. Although the CTOP has been extensively researched, the focus of research studies has been predominantly on exploring experiences and perceptions of women around this issue. Limited research has been conducted to look into the state of the quality of CTOP services in public health facilities following the Donabedian model of quality care.

It is now more than a decade since CTOP services have been implemented and public health facilities have been designated to provide this service. The quality of CTOP services in public health facilities has been seriously neglected. According to Adindu (2010:31-36), the quality of the CTOP services has received very little attention in many African countries. The quality of CTOP services in resource constrained public health facilities is a cause for concern because it is greatly compromised by the shortage of resources. The inadequate infrastructure of public health facilities and scarcity of resources (both human and material) render the provision of quality health services almost impossible (Adindu 2010:31-36).

Over the past years the quality of health services in public health facilities has deteriorated as reflected by the complaints raised by the public in the printed media as well as on television and radio programmes and the Presidential hotline (The Presidency Republic of South Africa 2009). The present appalling state of the public health facilities is blamed on an old infrastructure, dilapidated buildings, and shortages of staff (especially registered professional nurses and midwives) as well as a shortage of equipment. The dire conditions prevailing in public health facilities render the delivery of quality services difficult (Calculations and Additional Logistical Statistics report CALS & TAC 2013).

This increased access resulted in long waiting times and queues contributing to dissatisfaction with the service which could lead to missed appointments and non-compliance with established treatment plans as Sokhela, Makhanya,Sibiya and Nokes states (2013:4). The capacity of the existing facilities cannot accommodate the increased number of clients, affecting the provision of quality healthcare. In some health facilities, CTOP services are incorporated into the family planning units while in others it is offered in general wards, the ward is in divided allowing for a small space where the procedure to terminate a pregnancy is done. In their study Gmeiner et al (2000:71) found that insufficient provision was made to the infrastructure of health facilities to accommodate the high demand for CTOP services.

The issue of staffing has been a problem since the beginning of the implementation of CTOP services. The provision of quality CTOP services becomes difficult without the necessary number of skilled and knowledgeable staff, particularly registered professional nurses and midwives. The problem is worsened by the fact that CTOP services are associated with immorality, thus some professional registered nurses and midwives tend to distance themselves from rendering CTOP services (Harries, Stinson & Orner 2009:9). Gmeiner et al (2000:71) state there are not enough well-prepared and properly trained registered professional nurses and midwives and this has a direct impact on the delivery of quality CTOP services.

A further serious issue is the shortage of proper equipment because it contributes to the poor delivery of quality CTOP services. Client satisfaction with regard to the quality of services rendered in public health facilities is greatly affected by shortage of the equipment. Sonar machines, for example, are needed exclusively in CTOP units to make timeous diagnosis and render treatment accordingly as reported in the CALS & TAC report (2013).

Therefore, the intention with this study was to assess the quality of CTOP services in public health facilities in order to develop guidelines to improve the quality thereof using the Donabedian' model of quality care.

1.4 SIGNIFICANCE OF THE STUDY

It is predicted that the findings of the study will inform policy makers about strategies that can improve the quality of CTOP services in the public health facilities. The developed guidelines, based on the empirical data, should improve CTOP services or assist with the planning of interventions and/or innovations. It was the researcher's ultimate goal that these guidelines would be applied nationally because the problems encountered with rendering CTOP services are prevalent in public health facilities all over South Africa.

1.5 AIM OF THE STUDY

The aim of the study was to develop guidelines to improve the quality of CTOP services in public health facilities using the Donabedian model of quality care.

1.6 RESEARCH QUESTIONS

The research questions for this study were applicable to the two phases.

Phase 1 addressed three questions pertaining to the structure, processes and outcomes of the CTOP services in public health facilities.

- What is the quality of the structure of the CTOP services rendered in public health facilities?
- What is the quality of the processes of the CTOP services rendered in public health facilities?
- What is the quality of the outcomes of the CTOP services rendered in public health facilities?

In Phase 2 guidelines were developed to improve the quality of CTOP services in public health facilities.

- What is the current status of the quality of the CTOP services rendered in public health facilities based on the Donabedian model of quality care?
- How can the quality of the CTOP services rendered in public health facilities be improved?

1.7 OBJECTIVES OF THE STUDY

In order to achieve the objectives, the study was conducted in two phases.

In Phase 1 the objective was to determine the current state of the quality of the CTOP services in public health facilities in the Tshwane district using the Donabedian model of quality care to:

- assess the quality of the structure of the CTOP services in public health facilities
- determine the quality of the processes used in CTOP services in public health facilities
- evaluate the quality of the outcomes of the CTOP services in public health facilities.

In Phase 2 the objective was to develop guidelines to improve the quality of CTOP services in public health facilities in South Africa as a whole.

1.8 THEORETICAL FRAMEWORK

A theoretical framework is a logically structured representation of the concepts, variables and the relationship involved in a study with the purpose of clearly identifying what will be examined in the study being undertaken (Polit & Beck 2012:130-131). According to Wojner (2001:48), a framework provides a foundation for and direction to the study. A theoretical framework is a map or lens that guides the researcher's focus. The theoretical framework in this study was based on the Donabedian model of quality care because the purpose of the study was to develop guidelines to improve the quality of the CTOP services in public health facilities.

Donabedian model of quality care uses structure, processes and outcomes to comprehensively approach the assessment of the quality of healthcare services. Each of these mentioned three elements of Donabedian's model used to assess the quality in health services has its own uses and limitations. The strategy of combining the three elements to assess a health service would assist in identifying the cause of failures in quality while further suggesting corrective measures for improvement (Donabedian 2003:49 & 56).

Donabedian's framework is widely used to assess quality in health and it was also found to be relevant for this study since the aim of the study is to develop guidelines to improve quality of care. The researcher further chose Donabedian's framework because of its value to comprehensively assess the quality in CTOP services in public health facilities and to inform more effective quality improvement interventions. The choice to use Donabedian model was appropriate as the most essential elements critical for the quality improvement of CTOP services would be captured. The Donabedian framework outlines the interconnectedness of structure, processes and outcomes of care in a health facility. In this study, the structure component of Donabedian seemed to pose a significant barrier towards the delivering of quality CTOP services.

1.8.1 Structure

Structure refers to the buildings, equipment, material and human resources needed in an organisation to render the required service (El Haj, Lamrini & Rais 2013:20). In this study, the structural quality in terms of the buildings' suitability to serve as a facility where quality CTOP services can be rendered was a problem. Clients who, of their own free will, choose to terminate a pregnancy should be able to freely access the CTOP service delivery section in public health facilities. This section should be housed in a suitable and user-friendly part of the building and be spacious enough to accommodate many clients. The design of the CTOP section should make provision for a well-ventilated and private area where CTOP clients can feel comfortable and at ease. The section should comprise a pre-counselling, waiting and a post-CTOP room to allow the women to rest after having had a termination of pregnancy by choice. The structure should have a nurse's station, tea room and duty room and a change room with lockers for nurses for safekeeping their belongings (Pickles 2013:528).

As far as the equipment and material resources are concerned, the availability and adequacy of equipment related to the service rendered is important in the assessment of the quality of structure in health facilities (Donabedian 2003:46-55). The availability of consumables when providing CTOP services, for example, CTOP packs, syringes, needles and so forth necessary to terminate a pregnancy, is critical in the assessment. Knowledge of the CTOP Act (1 of 2008) and relevant policies governing the implementation of the CTOP service among staff as well as clients is of utmost importance when assessing quality in a health facility (Mendes 2011:11). In addition, essential equipment such as sonar machines and examination couches should be available for timeous diagnosis of women seeking termination of pregnancy by choice. The CTOP unit should have state-of-the-art equipment to improve the quality of CTOP services in public health facilities (WHO 2015:82).

In the CTOP structure component, human resource in healthcare facilities refer to the distribution of staff numbers, their qualifications and skill mix. It further includes assessing the exposure of staff to continuous training programmes to upgrade their

knowledge to meet the challenges and demands in the system (Donabedian 2003:46-55). In this study it had to be determined whether professional nurses were equipped with the necessary knowledge, skill and training to meet the required standards for the provision of CTOP services.

The staffing of CTOP services should use the skill mix method. More registered professional nurses should be allocated to meet the high demand for CTOP services. Having enough registered professional nurses and midwives would ensure that CTOP services operate for longer hours and therefore clients would have access to such services during the day and the night (Alameddine, Saleh, El-Jardali, Dimassi & Mourad 2012:8) The registered professional nurses and midwives should focus on the procurement of CTOP while the enrolled nurses need to monitor clients before, during and after termination of pregnancy. Skill mix increases human resource by allowing enrolled nurses to give health education to clients about CTOP to clients (WHO 2012:8).

1.8.2 Processes

Processes refer to how the organisation delivers the service. Activities undertaken in delivering healthcare to clients are assessed in relation to any deviation from the set standards. Good practices should be implemented in providing healthcare in a health service to improve client loyalty. The processes of service delivery should determine what the designated facility provides. The attitude of staff towards clients is essential in describing the relationship. Information regarding service times should be well explained and displayed for easy access. Monitoring of waiting time in relation to the length of time taken for clients to receive care is important to identify delays in receiving care (Donabedian 2003:46-55).

With regard to CTOP services in the healthcare setting pre-counselling of clients is vital to establish knowledge of the CTOP Act, alternative choices to consider like adoption, and to give health education with the focus on reproductive health (Strydom & Humpel 2009:218). Proper diagnosis and treatment of clients should be done thoroughly as part

of the process in rendering care. The procedure of having a termination of pregnancy by choice should be explained to the client and they need to be reassured that the CTOP staff is there to support and assist them. Post-counselling of clients should be provided to ensure continuity of care as required by the CTOP Act (1 of 2008). The processes of delivering healthcare are assessed to ensure clients are not subjected to harm within the premises of a healthcare facility. Clients and healthcare providers should value and appreciate one another for an efficient and effective relationship to be established (Donabedian 2003:46-55). The attitude of the CTOP personnel should always be positive as it will allow the clients to open up if the staff is welcoming, supportive and open when attending to the clients. A positive attitude allays anxiety in the already anxious client (Mannava et al. 2015:17).

Strategies should be put in place to reduce waiting time for women who are first stage of pregnancy so that bookings for a CTOP can be done timeously to prevent the pregnancy to advance to more than 12 weeks. Family planning should be encouraged post-termination of a pregnancy. The client should be offered all options on family planning and be assisted to choose an option that will suit her lifestyle as prescribed in the CTOP Act (1 of 2008).

1.8.3 Outcomes

Outcomes are the effects of the interventions rendered in a health service which are determined by a change in the health status of clients. Quality in health is perceived as efficient and effective when clients are satisfied. Clients should be knowledgeable about the services rendered in the healthcare facility they visit. The efficiency of a service is determined by the behaviour and attitude of clients when marketing it to others (Onwujekwe, Chikezie, Mbachu, Chiegil, Torpey & Uzochukwu 2015:1117).

Clients who receive quality care will display changes in their health status. Outcomes are measured in relation to clients' satisfaction, service effectiveness, service efficiency

and experience of the healthcare they received (Donabedian 2003:46-55). These aspects also apply to the CTOP services.

A client satisfaction survey should be done to determine shortfalls in the system and measures should be put in place to improve the CTOP service delivery. Client satisfaction survey results should be communicated to all stakeholders for inputs towards improving the quality of CTOP outcomes (Inchauspe & de Moura 2015:181).

1.9 PARADIGM

A paradigm is a "world view, a way of looking at natural phenomena that encompasses a set of philosophical assumptions that guide one's approach to research" (Polit & Beck 2012:736). According to Weaver and Olson (2006:259-260), paradigms are sets of beliefs and practices shared by communities of researchers regulating an inquiry within disciplines.

In this study the researcher opted to use the positivism (logical) paradigm approach. The positivism paradigm is directed at understanding the underlying causes of the phenomenon under study with an assumption that there is an orderly reality that can be objectively studied (Polit & Beck 2012:12 & 738). Within the positivism paradigm the researcher intended to determine the quality of CTOP services in public health facilities in the Tshwane district objectively.

1.10 DEFINITION OF CONCEPTS

The definitions of concepts applicable to this study are set out next.

1.10.1 Guidelines

Guidelines are "formal advisory statements that should meet the unique circumstances and constraints of a specific situation to which they are being applied" (Oxman, Schünemann & Fretheim 2006:2). It is stated by van Dijk et al. (2011:6-7) that guidelines are important instruments for improving the quality of healthcare services. In this study 'guidelines' will mean the streamlined structures, processes and outcomes aimed at improving the quality of CTOP services in public health facilities.

1.10.2 Improve

According to Stedman (2008:781), improve is the act or a process of "making better". It is an act of making better in terms of quality, value and usefulness. Improve can also mean bringing into a more desirable or excellent condition (O'Dell & Mikuls 2011:587). In this study 'improve' will mean the act or process of making better the CTOP services in public health facilities.

1.10.3 Quality

Quality is "the extent to which the care provided is expected to achieve the most favourable balance between benefits and risks" based on structure, processes and outcomes (Donabedian 2003:57). Quality also refers to getting the best results possible within the available resources (Policy on Quality in Health Care for South Africa 2007:10). In this study 'quality' will refer to the quality that is assessed based on structure, processes and outcomes in accordance with Donabedian's model of quality care.

1.10.4 Choice on termination of pregnancy

In this study choice on termination of pregnancy will mean the “separation and expulsion by medical or surgical means of the uterine contents of a pregnant woman” as stipulated in the CTOP Act (1 of 2008). This will include strict adherence to the gestation period, education of patients and all other restrictions and prescribed laws contained in the Act.

1.11 RESEARCH DESIGN AND METHODOLOGY

The research methodology refers to the technique used to structure a study, and gathering and analysing data that are relevant to the research questions (Polit & Beck 2012:12, 2010:16). Following, the researcher discusses the methods used in conduct the study and includes the research design, research settings, population, sampling, data collection and data analysis

This study was done in two phases. The first phase was done to answer questions on the structure, processes and outcomes on the quality of CTOP services following Donabedian’s model of quality care. The second phase focused on the development of guidelines to improve the quality of CTOP services in public health facilities.

PHASE 1

1.12 RESEARCH DESIGN

A research design is defined as the overall plan for obtaining answers to the questions posed in a study (Polit & Beck 2008:66). According to Terre Blanche, Durrheim and Painter (2006:34), a research design is the strategic framework for actions and serves as a bridge between the research questions and the implementation of the research. To

choose a research design, a researcher is guided by the research question and the purpose of the study.

In this study a quantitative, non-experimental cross-sectional survey approach was employed (Polit & Beck 2012:184) to develop guidelines to improve the quality of CTOP services in public health facilities using the Donabedian model of quality care. Quantitative research is a "formal, objective, systemic rigorous process for generating numerical information" (Burns & Grove 2011:34). The aim is to generalise the findings from the population sample. A survey is designed to "obtain information about the prevalence, distribution and interrelations of variables within a population" (Polit & Beck 2012:264, Polit & Beck 2008:323).

According to Fink (2003:1-2), a survey design is used to collect information for use in evaluation studies and in planning programmes and setting policies in health, education, business and government. The current researcher chose the survey approach because it was considered appropriate for assessing the quality of the CTOP services provided in public health facilities. The survey was cross-sectional with data collected at one point in time (Creswell 2009:146, LoBiondo-Wood & Haber 2008:233).

1.12.1 Research setting

A research setting refers to the physical location and conditions in which data collection takes place in a study (Polit & Beck 2008:766). The setting of this study will be all CTOP clinics in public health facilities in the Tshwane district offering CTOP services. At the time of study, the public health facilities in this district comprised of five community health centres (CHCs), two districts hospitals, and one regional hospital, one tertiary and one central hospital. There were 10 public health facilities rendering choice on termination of pregnancy health services in the area. These public CTOP health facilities were managed by registered professional nurses and midwives. Fourteen registered professional nurses and midwives worked in these public health facilities together with 10 health facility managers and 10 quality managers as well as the clients

per public CTOP health facility who received the service. The public health facilities rendering CTOP services were situated far apart.

1.12.2 Population

Parahoo (2006:256) defines population as "the total number of units from which data will be collected". The accessible population is the "aggregate of cases that meet the set criteria and is accessible as subject for the study" (Burns & Grove 2005:342, Polit & Beck 2008:338). The target population is the aggregate of cases from which the researcher would like to generalise the findings (Schneider et al. 2007:177).

The current study included three sets of populations: healthcare professionals, clients, and CTOP public health facilities. The first target population in this study was all the registered professional nurses and midwives rendering CTOP services in public health facilities including the health facility and quality managers in positions managing these facilities at the time of study. The second target population was clients who, at the time of study had received the CTOP service in these public health facilities. The third population included all public health facilities rendering CTOP services in the Tshwane district. In total the population was 124 which comprised of 34 healthcare professionals, 80 CTOP clients, and 10 public health facilities in the Tshwane district rendering CTOP services. According to Bruce, Pope and Stanistreet (2008:133), the population refers to the group of people that the researcher is interested in and to whom the study results should apply. The population inclusion criteria for this study were:

- the public health facility had to rendering CTOP services at time of the study
- the health facility had to be in a public health environment
- registered professional nurses and midwives had to be registered with the South African Nursing Council (SANC)
- the registered professional nurses and midwives had to be working in the CTOP service unit in public health facilities rendering CTOP services

- the public health facility and quality managers had to be in positions managing the health facilities at the time the study was conducted.
- the clients had to have already had a termination of pregnancy (be post-CTOP) in a public health facility
- all participants had to be 18 years and older to be included in the study.

The exclusion criteria were as follows:

- facilities which were offering CTOP services outside the public health facility environment, for example private hospitals
- clients who were younger than 18 years old were not allowed to participate
- clients who had not yet had a termination of pregnancy (were not post-CTOP) in a public health facility were not considered for participation
- anyone who did not meet the inclusion criteria as set out above.

1.12.3 Sampling method

Sampling is the "process of selecting cases to represent an entire population in order to make inferences about the population" (Polit & Beck 2012:275). A sample is therefore a subset of the population included in the study (Macnee & McCabe 2008:116). Polit & Beck (2012:275), state that a sample whose characteristics closely approximate those of the population under study is required since it is not practical to study all individuals in a population.

The study sample was drawn the first population group (the healthcare professionals) which counted 34 in total. The universal sampling method was used because the number of the first population of healthcare professionals was less than a 100 individuals. (Refer to section 1.12.4). The researcher selected registered professional nurses, midwives as well as health facility and quality managers from public CTOP health facilities as respondents because they are the ones who could provide rich and

in-depth information relevant to the phenomenon under study as stated by Richard & Margaret 1990:125 cited by Riñen in the PIA Press Release August 2011.

A convenient sampling method was used to obtain a sample from the second population group (80 CTOP clients who were post-termination of pregnancy in the public health facilities in this study). (Refer to section 1.12.4). According to Polit and Beck (2008:276), convenient sampling entails using the most available people as study participants. Burns and Grove (2005:350) define convenient sampling as the inclusion of subjects in a study because they "happen to be in the right place at the right time". Leedy and Ormrod (2010:312) define convenient sampling as "people or units that are readily available". The universal sampling method was also used for the third population, namely the 10 CTOP clinics in public health facilities in the Tshwane district because they also counted fewer than 100 (Refer to section 1.12.4).

1.12.4 Sample size

A sample size is "the number of units in a sample that need to be surveyed in order for the findings to be precise and reliable" (Fink 2003:34). Larger sample sizes are recommended for more representativeness of the population (Polit & Beck 2008:348). The first sample size in this study had 34 respondents comprising of 14 professional nurses as well as 10 health facility and 10 quality managers who all worked in the public health facilities where the study was conducted. A sample of clients was drawn from the CTOP clinics in the public health facilities. The third sample size in this study comprised of 10 CTOP clinics rendering CTOP services in the public health facilities in the Tshwane district.

The sample size in this study was determined by the number of staff allocated to the CTOP units, the number of clients who had received CTOP services in public health facilities, and the number of CTOP health facilities rendering CTOP services. A health facility has a manager and a quality manager to ensure it is managed properly and to monitor the quality of care despite its size. The individuals who held these two positions

in the facilities at the time of study also formed part of the sample as indicated. Post-CTOP clients were included as participants in the study to describe the quality of the outcomes of the CTOP services in public health facilities.

1.12.5 Data collection instrument

Macnee and McCabe (2008:175-176) refer to a data collection instrument as a “device that specifies and objectifies the process of data collection”. A data collection instrument is a formal written document used to collect data and record information (Polit & Beck 2012:191).

In this study, self-administered questionnaires with open- and closed-ended questions were used to collect data from the study respondents. A questionnaire is an instrument printed on paper and respondents use pens to complete the printed questions. Information relevant to the study topic is therefore collected on a form specifically designed to elicit data from respondents. It allows for distribution to a large sample and all responses remain anonymous (Burns & Grove 2008:353).

Self-administered open-ended and closed-ended questionnaires were used to collect data regarding the quality of the structure, processes and outcomes of CTOP services in public health facilities in the Tshwane district in Gauteng. The questionnaire on structure was used to determine the suitability of the buildings to meet the required standard for the provision of CTOP services, availability of equipment, the material and human resources including how the CTOP Act (1 of 2008) and other relevant policies governing the implementation of CTOP services were made available and accessible to the staff as well as the clients.

The questionnaire on processes was developed to determine the activities undertaken in delivering CTOP services. This included the attitude of the staff towards clients, the waiting time on the booking list, pre-counselling services, proper diagnosis, post-counselling and the offering of family planning, follow-up and health education.

The questionnaires on outcomes were used to determine the change in the clients' health status, their satisfaction with the CTOP service received, the knowledge they gained, and the effectiveness and efficiency of the services rendered by the professional healthcare staff. The behaviour and attitude of clients when marketing the CTOP service to others were also included in the questionnaire. It was estimated respondents would need between 25 and 35 minutes to complete all three questionnaires. The respondents were required to answer dichotomous questions which required a "Yes" or "No" answer.

The questionnaires consisted of four sections, namely: demographic data and the three sections on the structure, processes and outcomes on the quality of CTOP services in public health facilities. A tool was designed by combining and modifying ideas from different studies for use to generate numeric data to quantify and generalise the findings in this study (Dunemn, Roehrs & Wilson 2017:82).

1.12.6 Data collection method

According to Burns and Grove (2009:695), data collection is a "precise, systemic gathering of information which is relevant to the purpose or specific objectives of the research". Data are "pieces of information" obtained in a study. Data is collected by observing, testing, measuring, questioning and recording or a combination of the above methods (Burns & Grove 2005:430). For the purpose of this study questionnaires were used to collect data.

The researcher obtained permission from the management of the health facilities to access the respondents in their area of work. Information was given to all those who were interested about the purpose of the study in order to gain their interest and cooperation (Degu & Yigzaw 2006:92). The researcher then personally delivered the questionnaires by hand to respondents individually. This allowed each respondent time with the researcher to clarify uncertainties and/or ask questions pertaining to the content of the questionnaire if necessary. The clients who had chosen to make use of the

CTOP services at the public health facilities were requested to respond to questionnaires about the outcomes of the quality of CTOP service after the termination of pregnancy. Due to the sensitivity of the topic under study and the vulnerability of CTOP clients, a psychologist was arranged for counselling session if needed.

In this study, the self-administered method of open-ended and closed-ended questionnaires was viewed as suitable for gathering data to assess the quality of CTOP services in a cross-sectional survey. It is a cost saving method in terms of time and money and covers a large area in an economic manner (Creswell 2009:147).

1.12.6.1 Pilot study

Chenail (2011:257) refers to a pilot study as a procedure for testing the quality of the research instrument to identify potential research bias and try out the proposed method to determine whether it will yield results as planned. The purpose of a pilot study is also to make adjustments to the instrument if needed, to improve the questions if needed, improve the questions if necessary and to incorporate all relevant comments in the final questionnaire before conducting the main research study (Creswell 2009:150).

A pilot study was conducted with all the staff in a CTOP clinic in a public health facility with characteristics similar to those of respondents who would be included in the main study. Amendments would be made to the instruments depending on the responses from the pilot study respondents. Feedback would then be given to the pilot respondents in the form of a report addressed to the participating pilot clinic before commencing with the main study. The respondents in the pilot study and the information obtained from them did not form part of the main study (Arain, Campbell, Cooper & Lancaster 2010:6).

1.13 DATA ANALYSIS

Data analysis is the “systemic technique of organizing and synthesising research data to reduce and give it meaning” (Burns & Grove 2011:535). In this study the quantitative data gathered from the participants was entered into a computer program. The data was analysed using the STATA version 14 software. It is easier to use a computer program to analyse quantitative data (Nunes, Alvarega, de Souza Sant Ana, Santos & Granato 2015:270). The researcher made use of the services of an experienced and professional statistician to analyse the data.

During data interpretation the researcher drew conclusions and made meaning of the results (Brink, van Der Walt & van Rensburg 2006:55). The results of the analysed data were presented in the form of figures, graphs, tables, percentages and frequencies. Frequencies and percentages were used to display biographic data information. The importance of outlining the limitations of the study in data interpretation was highlighted since no research is absolute and should therefore allow for further research (Ioannidis 2007:324).

1.14 ETHICAL CONSIDERATIONS

The researcher needed to obtain appropriate approval and authorisation of the proposal by the Research Ethics Committee of the University of Pretoria, the Gauteng Department of Health Research Committee and the public health facilities that were involved before conducting the study. The researcher further also had to obtain permission from the CTOP clients. Due to the sensitivity of the topic under study and the vulnerability of the clients, a psychologist was arranged for a counselling session for the clients if required.

1.14.1 Consent form

The meaning of informed consent is that participants have adequate information regarding the research study, are capable of comprehending the information, and have the power of free choice with the ability to consent to or decline participation (Polit & Beck 2008:176).

The respondents who were willing to participate in the study were asked to sign an informed consent form which indicated the study purpose, method of data collection and analysis (Rebar et al. 2010:133). As instructed by Polit and Beck (2008:177-178), it was the researcher's responsibility to explain the process of the study and to make sure all the respondents were informed and knew they would not be obliged to complete the questionnaire, but could withdraw from the study at any point in time if they so wished without prejudice or stating a reason (Polit & Beck 2008:177-178).

1.14.2 Confidentiality

The respondents were guaranteed confidentiality would be maintained throughout the study. The information was treated with strict confidentiality and used only for the purpose of the study. The information provided by respondents in this study was not accessible to others and was not, and neither will it be in future, reported publicly in a manner in which their identities would become known (Polit & Beck 2008:180).

1.14.3 Anonymity

To ensure anonymity, the questionnaires did not require the names or surnames of the respondents as this could link their identity to individual responses. Instead codes were assigned to their responses to ensure they remain completely anonymous (Polit & Beck 2008:180, Rebar et al 2010:135).

1.14.4 Privacy

To ensure privacy, the questionnaires were not linked to any individual's identity. The information on the questionnaires was based on the objectives of the study and was kept strictly confidential (Polit & Beck 2008:174). In this study the researcher allocated unique codes to guarantee the respondents' privacy (Leedy & Ormrod 2010:102).

PHASE 2

1.15 DEVELOPMENT OF GUIDELINES

Phase 2 of the study focused on the development and refinement of guidelines for the improvement of the quality of CTOP services in public health facilities. A detailed discussion is provided in chapter 6 of the study.

1.15.1 Design

The modified Delphi technique method was used to solicit information from the selected panel of experts. The modified Delphi technique method in this study consisted of three rounds from which to reach consensus.

1.15.2 Population and sample

The population in Phase 2 comprised of panel of experts working in CTOP and reproductive health services in public health facilities. The sample was purposively selected based on their commitment, experience and knowledge of working with CTOP and women's reproductive health services.

1.15.3 Validity of guidelines

Validity is referred to as the degree to which research conclusions were accurate and sound (Terre Blanche 2008:90). In this study the guidelines developed were validated by the consistency of the panel members' results (Day & Bobeva 2005:112). The use of the Delphi technique method increased the validity of the guidelines developed. The researcher has also sought the experts' consensus on the findings of the survey.

1.16 OUTLINE OF THE STUDY

- Chapter 1: described the background to the study, problem statement, the research questions and objectives, significance of the study as well as clarified the concepts.
- Chapter 2 focused on the literature review on the quality of CTOP services in public health facilities where the study was conducted.
- Chapter 3 presents the research design and methodology
- Chapter 4 presents the interpretation and presentation of the results
- Chapter 5 presents the discussion of Fisher's exact results
- Chaptr 6 presents the development of guidelines to improve the quality of CTOP services in public health facilities
- Chapter 7 comprises the summary and discussions of the findings, limitations, conclusions and recommendations.

1.17 CONCLUSION

This chapter provided an introduction and background to the study, the problem statement, research question, significance of the study, the methodology to be used as well as clarified the concepts used in the study. The Donabedian model of quality care was discussed as the framework of the study used to assess quality of CTOP services in public health facilities. The following chapter, chapter 2 focuses on the findings of

literature review on guidelines to improve the quality of CTOP services in public health facilities.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the literature review related to the quality of CTOP services in public health facilities guided by the Donabedian model of quality care. Donabedian's model of quality care has been used widely to assess quality in health and is relevant in this study. Reviewing current available literature is imperative as it helps the researcher to establish recent developments and what is presently known about the topic under study. The literature review assists with identifying possible gaps in what is already known about the study topic; it is an exploration of the body of work which has already been published by other researchers on the topic (Polit & Beck 2012:95, Hofstee 2009:91). Grounding this research work in previous literature strengthened the researcher's vision that the development of a model guided by Donabedian's model of quality care can augment the current standard of CTOP provision in public health facilities in SA leading to better patient outcomes.

The literature search was sourced from databases that present health science and quality care topics on the Google search engine, Ovid, EbscoHost, CINAHL, Medline and PubMed. The literature search key words included CTOP services, quality care, public health facilities, Donabedian structure, process and outcomes.

Literature reviewed included articles dated from 2007 to date as this allowed for the gathering of data on the most recent and newest progress in knowledge of CTOP developments based on the Donabedian model of quality care. However, some influential earlier work relevant to this investigation was included to strengthen the significance of this investigation.

The literature review will be presented under the following headings:

- the quality of the structure of CTOP services in public health facilities
- the quality of the processes of CTOP services in public health facilities
- the quality of the outcomes of CTOP services in public health facilities

2.2 CURRENT SITUATION REGARDING CTOP SERVICE DELIVERY IN SOUTH AFRICA

The internationally set targets for SA to reach MDG5 (improving maternal health) by 2015 was benchmarked as 38 deaths per 100 000 live births as well as to assure provision and access to reproductive health services by the same year (Millennium Development Goals (MDG) Country Report 2013:74; WHO, UNICEF, UNPPA & The World Bank, 2012:1). Since 1994 the South African Government together with the NDoH have put in place a wide range of policies, programmes, treaties, and conventions to promote maternal and reproductive health in an effort to decrease SA's maternal rates. Yet, the most recent available estimates produced by Statistic South Africa (SSA) show that in 2010 the ratio was 269 maternal deaths per 100 000 live births (MDG Country Report 2013:74,77).

The current high level of maternal mortality expressed in its population policy and the NSD of 2010 – 2014 is a major concern to the South African Government and Department of Health (DoH) (MDG Country Report 2013:71). Since SA became a democracy in 1994 women's health became an important issue on government societal and community level (Gmeiner, van Wyk, Poggenpoel & Myburgh 2000:70). The passing of the CTOP Act (92 of 1996) and more recently the CTOP Act (1 of 2008) as an amendment of section 1 of the CTOP Act (92 of 1996) gave women in SA the right to independently choose to terminate a pregnancy and make decisions about their reproductive health. This is in line with the country's constitutional framework that "endorses the right to health for the population" and Bill of Rights that enshrines the rights of all people in our country and affirms the democratic values of human dignity,

equality and freedom" (Bill of Rights 1996:5).The ultimate aim with these Acts is for legal termination of pregnancy to be carried out in an environment that conforms to minimal medical standards (Srivasta, Rai, Saxena, Roy, Chaudhary & Singh 2013:211) by registered nurses and midwives who have the necessary skills and training (Harries, Stinson, & Orner 2009:2).

Giving women in SA the freedom of choice in terms of the legal termination of pregnancy was a confident step to honour their human rights and to to decrease maternal mortality rates, but various serious problems emerged over time and remain prevalent. Stigmatisation (of both women who opt for CTOP services as well as of nurses who provide these services) is still a problematic issue; moral and ethical issues remain a personal as well as societal concern while the absence of knowledge regarding abortion legislation is an additional barrier. In addition, illegal abortions (whether self-induced or conducted illegally by quacks) unabatedly continues to endanger women's lives. CTOP services provision are substandard in terms of infrastructure and trained staff (Cooper, Dickson, Blanchard, Cullingworth, Nqobile & von Mollendorf et al 2005:35-39, Harries et al 2009:2, Lebese 2009:35-7, Mhlanga 2003:125, Srivastava et al 2013:211-13).

The quality of CTOP services is an immerse issue because of its impact on reproductive health, service performance and client satisfaction. The MDG country report, for example, confirms that "one of the leading causes of mortality among women of reproductive age" is complications related to pregnancy and childbirth (MDG Country Report 2013:1).

In SA public health facilities are the major providers of reproductive health services. Hence, to improve the quality of CTOP services and to also deal with reproductive health challenges, the quality of all resources must be available and accessible to all women who make use of it. Clearly, since implementation of the CTOP Act (92 of 1996) in SA in 1997 the infrastructure in public health facilities providing CTOP services has not been sufficiently assessed to determine their suitability for providing CTOP services or to determine how and what changes are needed in these facilities to improve the

delivery of first trimester termination of a pregnancy services (Lebese 2009:35; Mhlanga 2003:119). It can therefore be posited that the current substandard conditions in public health facilities in SA pose a huge challenge to safely implement the CTOP Act of 1996 and CTOP Act 1 of 2008 as amended.

To transform the current provision of healthcare services into a service of excellence that is people-driven and people-centred there is an urgent need to positively respond to the reproductive health needs of women as they constitute a large portion of the consumers of health care (Arries & Newman 2008:41). The appropriateness of investigating how the triangle of broader forces (structure, processes and outcomes) currently impact on the quality of CTOP services delivery in public health facilities was a heedful response to the urgent call by the WHO for more to be done (and emphasising that much more can be done) "to save women's lives and prevent disabilities that could irrevocably alter a woman's and her family's future" (WHO 2011:29).

Literature sources revealed that at present it is challenging to deliver quality CTOP services in South African public health facilities due to the diverse and prevailing infrastructural problems experienced. For example, Lebese (2009:35) who did a study on the experiences of nurses directly involved with termination of pregnancies in Limpopo (one of the nine provinces in SA), concludes public health facilities should improve the infrastructure of CTOP services to accommodate the large numbers of women seeking this service. The author adds in some hospitals and clinics designated as termination of pregnancy service points the dire shortage of trained staff and an infrastructure not equipped to cope with the high influx of clients in need of CTOP services hamper quality service provision. It can therefore be posited that the current substandard conditions in public health facilities in SA pose a huge challenge to safely implement the CTOP Act of 1996 and CTOP Act 1 of 2008 as amended.

The theoretical framework in this study was based on the Donabedian model of quality care because the purpose of the study was to develop guidelines to improve the quality of CTOP services in public health facilities. According to this model of quality care, structure refers to the material and human resource in the environment in which care is

provided. Material resources denote the facility and the equipment for providing quality care while human resources are concerned with the staffing ration per client and the staff's qualifications, knowledge and skills (Donabedian 2003:46-53). Using Donabedian's model to assess the quality of reproductive health services and focusing on the termination of pregnancy in public health facilities will hopefully assist to bring the current substandard state of the facilities' infrastructure and the detrimental effect it has on South African women's health to the attention of policy makers and managers (Scholz, Ngoll & Flessa 2015:9).

2.3 QUALITY OF THE STRUCTURE OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

According to Donabedian's model of quality care, structure refers to the material and human resources in the environment in which care is provided. Material resources denote the facility and the equipment for providing quality care while human resources are concerned with the staffing ratio per client and the staff's qualifications, knowledge and skills (Donabedian 2003:46-53).

2.3.1 Material resources

Unfortunately, as much research shows infrastructure still remains a major barrier to the delivery of quality (safe, effective, efficient and timely) CTOP services in public healthcare facilities in developing countries. By assessing the quality of antenatal care services in the Nkwanta South district in the Volta Region of Ghana, Kwami (2012:8) confirms that the delivery of quality and safe CTOP services in public health facilities is dependent on an adequate infrastructure, sufficient equipment and skilled healthcare professionals. In Tanzania Shija, Msovela and Mboera (2011:8) identified infrastructural challenges as critical for the delivery of quality CTOP services. These authors therefore recommended upgrading of the infrastructure for improvement in CTOP service delivery. Kumar and Singh's (2007:43) study in Jharkhand, India, focused on an action

plan to assess the current situation of maternal and newborn care at government health facilities. They found that public health facilities, in spite of being the main source for healthcare services, had extremely poor infrastructural conditions. Public health facilities are the major providers of reproductive health services; hence the focus should be on improving the quality of the infrastructure to be able to deal with the reproductive health challenges. Agreeing with Kumar and Singh (2007), Lafort and Donaldson (2009:34) add despite the overwhelming demand for CTOP services, the poor infrastructure in public health facilities significantly hinders the achievement of quality CTOP service delivery.

In addition, in an external evaluation of two public-private partnerships for sexual and reproductive health services, the final report revealed the decrease in the number of designated public health facilities offering CTOP services was due to the lack of space and shortage of staff. The situation is made worse by some designated facilities not offering CTOP services at all (Lafort & Donaldson 2009:11). In this regard, Jacobs, Hornsby and Marais (2014:868) agree that limited accessibility is a problematic issue. These authors found in two provinces of SA in Gauteng and Mpumalanga, this situation led to overcrowding in other health facilities in nearby areas where CTOP was still provided.

A central issue in many literature sources was that it appears as if the same structural challenges are faced over and over again in developing countries including SA. There seems to be no noticeable improvement in the quality of infrastructure in public health facilities that houses CTOP services. Shah, Ahman and Ortayli (2014:S47) report for almost 23years – from 1994 when the International Conference on Population Development (ICPD) was held in Mexico city with special focus on women's health; their rights; empowerment and social determinants – up till the present the CTOP structure in healthcare facilities in developing countries has shown almost no progress. The substandard infrastructure for CTOP services delivery in public health facilities in terms of accessibility, spaciousness, proper ventilation and lighting, assured privacy as well as comfort has a negative impact on the delivery of quality care and client satisfaction. The provision of an adequate infrastructure for access to safe and successful information

sharing must not be undermined because the CTOP Acts (92 of 1996; 1 of 2008) as amended provide protection for women most in need of termination of a pregnancy and are "accorded access to services to prevent unwanted pregnancies and to safely terminate pregnancy when the need arises" (Mhlanga 2003:126). To clarify the terms ' women most in need of termination of a pregnancy' and 'when the need arises' one may consider the following directive provided by the WHO (2011:30).

Health care during pregnancy is vitally important in detecting and managing conditions that may complicate pregnancy and childbirth. Basic antenatal care provides women with a package of preventive interventions, including nutritional advice. Women are also alerted to danger signs that may threaten their pregnancy and given support in planning a safe delivery (WHO 2011:30).

Nguyễni, Gammeltoft and Rasch (2007:176) state they did a need assessment in the main maternity hospital in Viet Nam prior to implementation of CTOP services. It was found that the facility was structurally poorly equipped for CTOP purposes as it lacked space and privacy. Ngabo, Zoungrana, Faye, Rawlins, Rosen and Levine (2012:24) undertook a survey in Rwanda and discovered the infrastructure of facilities providing CTOP services so unacceptable that these authors recommended either extreme renovation be made to the old building or a new building with an infrastructure providing sufficient space for the large numbers of clients should be built. Similarly Harries et al (2009:8) who did a qualitative study with CTOP providers based in either an urban site or three rural areas within the Western Cape, SA, found the majority of participants voiced their desire for having "dedicated centres for CTOP" or "special abortion clinics" as this would create a more supportive environment for both clients and providers. Chimtembo, Maluwa, Chimwaza, Chirwa and Pindani (2013:345) describe the health facilities in Malawi's Dedza district improvised space in their units for physical examinations of CTOP clients because there was inadequate space to accommodate the service fully.

According to Chatirvedi, Ali, Randive, Sabde, Diwan and de Costa (2015:3) improving the infrastructure (which includes the chosen site for the facility and the condition of the

buildings) of a facility concerned with the reproductive health of women and where safe CTOP services can be provided, is pivotal to improve women's quality of life. Chimtembo et al (2013:34) and Chatuverdi et al (2015:5) are in agreement that government intervention to improve the infrastructure in its healthcare facilities is essential. In their opinion, accommodation programmes aimed at improving the quality of health services which include CTOP service delivery should be viewed as an investment made by governments in the quality of health and life of the people in a country. Indeed, Ponndara (2012:52) who studied childbirth practices of public and private skilled attendants and the quality improvement system in Cambodia reaffirms that the quality of its health services and its association with efficient and effective care delivery is an important issue in countries all over the world.

Quality health services produce outcomes that satisfy clients and enhance organisational performance (Mosadeghrad 2012:251). In this regard, Sardasht, Shourab and Jafarnejad (2013:51) confirm the Iranian government has recognised that improving the quality of CTOP services would significantly benefit the Iranian health system and for this reason enhancing its reproductive health service including termination of pregnancy is viewed as a priority and is receiving urgent attention. Also, Arantes, Alvares, de Paula Corrèa and Marcon (2014:246) report in Brazil an adequate infrastructure promoted good quality health practices with better patient outcomes strengthening Blake's (2012;120) assertion that an adequate infrastructure is positively associated with better patient care.

In SA a dilemma arose when the CTOP Act (92 of 1996) was implemented in 1997. Although it was envisioned that the health system would be prepared and sufficient health workers would be trained once the Act was implemented, the sudden influx of women who presented for CTOP before it was actually implemented, was unexpected (Mhlanga 2003:119). Elaborating further on this issue, Lebese (2009:35) writes the fact that "some of the hospitals and clinics designated as CTOP service points were not ready to suffer the service in terms of trained staff and infrastructure" and that those which were already functioning had to cope with an exorbitant number of CTOP clients were major challenges. As explained by Mhlanga (2003:120), the immediate problem

which had to be dealt with was to provide access to safe practices in a safe environment.

To ensure this practice was indeed followed, Mhlanga (2003:119) states, regulations were developed and these set out criteria for facilities wishing to offer surgical termination of pregnancy. These regulations also established norms and standards for performing the procedure. The safety of the woman is the prime concern of the Act, and anyone terminating a pregnancy must be competent to do so, and must have easy and ready access to supportive equipment and resuscitation facilities. There must also be ready access to emergency transport should this become an emergency (Mhlanga 2003:119).

But, as mentioned, due to the high numbers of clients requesting CTOP and the subsequent acceleration towards achieving Millennium Development Goal 5 (MDG 5), namely to improve maternal health by 2015, CTOP services in SA were incorporated into other healthcare units. CTOP clients were thus housed in public health facilities together with other clients. Lebese (2009:94) mentions in her study in three designated health facilities in Limpopo province "the working arrangement suggests that they [CTOP] are allocated 'temporary accommodation' in maternity ward and wait to be examined and discharged". Fadila, Ogujiuba and Stiegler (2013:593) point out that adequate space can definitely improve the quality of CTOP services. If the CTOP unit has allocated rooms where only CTOP is provided, the client will be assured of privacy, the CTOP team can deliver a better quality service in a private environment while those waiting to be attended to will be more comfortable and less stressed during the waiting time.

Harries et al (2009:8) also conclude that the large client numbers together with the limited suitable private spaces at designated facilities make it extremely difficult to provide adequate counselling and care". Tvedt, Sjetne, Helgeland and Burkholm (2014:757) agree a good infrastructure with adequate space maximises healthcare professionals' efforts to facilitate quality care associated with improved client outcomes. Indeed according to the "Patient's Right" all clients are entitled to healthcare that is

provided in a healthy and safe environment which include safeguarding confidentiality and privacy.

The major problem with inadequate space is that the client's privacy is invaded and this makes it difficult for them to give detailed history to healthcare professionals. Various literature sources confirm this statement. Nguyễni et al (2007:176) found that space constraints led to poor interpersonal relations between clients who receive CTOP services and staff. The majority of Vietnamese women were unhappy and had serious concerns about being examined in front of the clients. Pickles (2013:518) assert the poor infrastructure and lack of space in public health facilities for performing a CTOP seriously undermine privacy – that is, if this service is available; in many instances, CTOP service is not available in the health facilities.

According to Kandasamy (2013:14), the infrastructure has an impact on the quality of CTOP services because privacy is a priority when assessing clients and discussing personal information. In other words, a lack of space and privacy contributes to the argument of Coetzee et al (2012:170) who state the infrastructure in public health facilities is to be blamed for the poor quality of care rendered; thus including reproductive health and CTOP services.

In her study on meeting the sexual and reproductive health needs of HIV care and treatment of clients in Swaziland, Church (2011:248) found that the lack of privacy restricted women to discuss serious reproductive health challenges or even give adequate history to the attending healthcare professional. This confirms the critical impact of poor infrastructure and inadequate space has on the provision of quality and safe legal abortion. Inadequate history from clients negatively impacts on prescribed proper treatment protocols; problems or concerns are not mentioned by women due to the lack of privacy because they cannot freely and openly communicate with the health professionals.

In the "Patients' Right Charter" it is further clearly stated the client also has a responsibility. Every client who receives CTOP services at designated healthcare facilities is responsible for providing healthcare providers with relevant and accurate

information for proper diagnosis, treatment, rehabilitation and counselling purposes ("Patients' Right Charter").

Regarding the assessment of the structure in CTOP service delivery in a health facility, Arantes et al (2014:247) supports the provision of privacy for women during consultation. Assured privacy is an essential factor in reproductive examinations to ensure better results in interventions. The lack of privacy limits the healthcare professional from listening and extracting relevant, important information needed to provide the correct care; the lack of privacy therefore interferes with quality care (Arantes et al 2014:247). Full disclosure of information will allow healthcare professionals to strive towards improving the quality of CTOP services which will improve women's reproductive health. It will also build trust and respect between women and healthcare professionals. In the view of Wu, Godfrey, Prine Anderson, MacNaughton and Gold (2015:164), privacy is very important to women because they fear disclosure and the stigma often associated with termination of pregnancy.

According to Coetzee et al (2012:164), the relationship between infrastructure and quality has an important effect on the reduction of serious adverse events in a healthcare facility. Clients demand quality, safe care which improves their health and overall well-being. Quality is recognised as a strategy to improve or maintain the standard of reproductive healthcare delivery. Chaturvedi et al (2015:2) conducted a study on the availability and distribution of safe abortion services in rural areas in India. These authors are convinced that enhancing CTOP services will improve the quality of women's reproductive health by citing that unsafe of a pregnancy is preventable. Public health facilities are expected to deliver health services, including CTOP services which are safe, effective, efficient and timely to meet the needs of the clients. The aspect of time is especially important in the case of termination of a pregnancy because it is a time-restricted health service under current legislation in SA, abortion on request can only be provided by registered, trained healthcare professionals and midwives up to and including 12 weeks of gestation (CTOP Act 92 of 1996).

Long waiting time and overcrowding go hand-in-hand and it then becomes harder for the healthcare providers to maintain standards of care (Hoque & van der Heever 2011:1). Overcrowding in health facilities where CTOP is provided poses an enormous challenge. It is important to offer CTOP clients brief waiting times so that they do not experience too much discomfort of become stressed and scared. One of the biggest problems caused by long queues and waiting times is that CTOP clients are discharged prematurely without the necessary examination being done. In the opinion of Chimtembo et al (2013:245), overcrowding is an immense obstacle because improvising space for the high number of CTOP clients lead to low quality care as well as compromising the right of women who are in the first trimester of their pregnancy to choose to have an early, safe and legal abortion (Harries et al 2009:2).

In a study done by these authors and which included site in three rural areas within the Western Cape, SA, a recommendation was that stand-alone clinics catering for only CTOP clients in a supportive environment with a suitable infrastructure, knowledgeable healthcare capable of providing the CTOP service and a "range of representative services from pre-abortion counselling and referral to post CTOP suitable counselling and contraceptive services" should be considered (Harries et al 2009:10). Rendering quality abortion-related services protects women's health rights and ensures the provision of quality antenatal and postnatal services. According to these authors, without "skilled abortion service providers, adequate facilities and easy access, the promise of safe, legal abortion will remain unfulfilled (Srivastava et al 2013:214).

There is growing public awareness about the importance and benefits of quality in healthcare. Longtin, Sax, Leape, Sheridan, Donaldson et al (2010) cited by Arnetz, Zhdanova & Arnetz (2016:1) confirms unlike in the past when patients received information on their health status by a doctor or nurse, in modern society technological advancements such as the Internet, printed media and radio and television give patients easy access to information and they are therefore well informed and can and do demand medical care. Patients are thus more "actively involved in discussions regarding their medical care" (Arnetz et al 2016:1). It can therefore be posited that many women who have already decided on a termination of pregnancy are actively involved in

their own healthcare and their expectations of better quality care are high. However, quality care is also the human right for women who have no access to healthcare information or who may be illiterate due to being of an older age. Therefore, as Mosadeghrad (2012:251) declares, quality is not valued for its own sake but for that of its perceived effect of improving the reproductive health of women and utilisation of available CTOP services in public health facilities. The right to expect and receive quality services in any healthcare facility is not a unilateral but a universal right.

Clients tend to assess healthcare facilities by looking at its accessibility, the cleanliness, the comfort and attractiveness with spacious rooms which should be well ventilated and offer privacy (Mosadeghrad 2012:251-254). To satisfy CTOP clients, the infrastructure of the health facility must provide enough space to accommodate the growing number of CTOP clients from all walks of life. Ventilation in CTOP areas is essential and proper air conditioning systems should be installed. Khamis and Njau (2014:2) found patients' level of satisfaction with care received at the Mwananyamala hospital in Dar es Salaam, Tanzania was closely related to the infrastructure – patient satisfaction increased if their experience of the infrastructure was satisfying which, in turn, increased good patient outcomes. Good lighting is an important factor in a building; in a health facility good lighting is also beneficial to the employees and healthcare users alike (Gómez-Acebo, Dierssen-Sotos, Pérez-Belmonte & Llorca 2013:570). Light represents positivity whereas little light leads to a gloomy and negative atmosphere (Weiss & Spies 2014:334). Clients appreciate better lighting since it represents positivity (Mehrotra, Basukala & Devarakonda 2015:55).

On national as well as international level debates and discussions on maternal morbidity and mortality, the topic high on the agenda is the quality of CTOP service delivery. In fact, all governments at ICPD conferences agree that reducing maternal morbidity and mortality is one of the major crises facing termination of pregnancy including reproductive health service delivery to women (United Nations Fund Program of Action 1994: iii). The Millennium Development Goals Report 2014 found most maternal deaths (62%) occurred in sub-Saharan Africa in 2013 with "an estimated 289 000 women in

2013 alone who died during pregnancy, childbirth, or within 42 days of termination of the pregnancy, from causes (excluding accidental or incidental causes) related to – or aggravated by – pregnancy or its management" (WHO 2014:29). Earlier Mokgethi, Ehlers and van der Merwe (2006:33) already made the challenging statement that many maternal deaths could be avoided if legalised termination of pregnancy services "were provided under hygienic conditions". The WHO (2014:29) bases its affirmation on more recent facts and research showing that in the majority of cases "the largest proportion of such deaths are caused by obstetric haemorrhage, mostly during or just after delivery, followed by eclampsia, sepsis, complications of unsafe abortion". From the viewpoint of the WHO (2014:29), facilities need to be enhanced to include "access to family planning, and information and services for reproductive health, especially in vulnerable populations. Monitoring efforts have to be strengthened to ensure that effective action is taken."

The negative impact that the substandard structure of CTOP services in public health facilities have on clients is equally damaging to registered nurses and midwives whose perceived roles include "caring, collaboration, advocacy, leadership, supervision, mentoring, management and other extended roles" in an environment where there is "increased emphasis on policy and legislative reform, development of standards of care driven by the need for quality improvement" (Magowe, Seboni, Rapinyana & Phetogo 2016:103-4). This cadre of healthcare providers work in a complex and complicated environment where space constraints, overcrowding, scarcity of equipment and staff shortages make the successful, safe and quality CTOP care they are committed to deliver almost impossible. In fact, the isolation and rejection of CTOP services and its clients "in terms of the lack of equipment and resources to render the service effectively" (Lebese 2009:94) can lead to the "risks of inadequate haphazard care, increased practice errors and litigation" (O'Shea 2013:47).

An infrastructure that promotes not only the health of staff but also staff retention as well as client satisfaction is recommended for rendering quality health services (Makasa 2008:85). Staff retention and client satisfaction are registered as benefits enhancing organisational performance in any facility boasting an adequate infrastructure. Zungu

(2007:15) is of the opinion that an adequate infrastructure increases work production and improves the employees' motivation to work as well as the satisfaction they derive from their work. A good infrastructure is associated with job satisfaction and motivated personnel resulting in a low staff turnover and is thus directly linked to the retention of healthcare professionals in CTOP services.

The WHO (2011:6) defines medical equipment as instruments or apparatus used for a specific purpose in the prevention, diagnosis and treatment of medical conditions. Medical equipment makes the diagnosis and treatment of clients in public health facilities easy; the lack thereof hinders the delivery of safe and quality care thus preventing the patient from receiving the quality of care she or he expects and is entitled to. A lack of equipment has a negative impact on rendering quality health services as it leads to low standards of care (Mosadeghard 2014:87). In the Republic of Uganda, for example, Zaramba (2009:1) confirms it is stated in Chapter 1 of The National Medical Equipment Policy that the management and use of equipment influences the quality of healthcare delivered to clients. A paper "availability and access to abortion in India" myth and realities presented by Khan, Barge and Kumar (2013:9) in Centre for Operations Research and Training (CORT) further implies some of the facilities designated to provide termination of pregnancy in India cite the lack of equipment as the reason for non-provision of termination of pregnancy services. Hsia et al (2011:235) emphasise that health facilities should have the correct equipment and instruments available to render appropriate care to their clients. In the case of the termination of a pregnancy, the availability of specific equipment and instruments is crucial to improve the outcome for clients and the health facility alike (Yeboah, Ansong, Yeboah, Antwi & Yiranbon 2014:144).

The shortage of sonar machines and examination couches delays the processes of pregnancy termination (Wariki, Ali, Mori, Wantania, Kuroiwa & Shibuya 2015:187) because the couches are used as rest beds after termination of pregnancy. This is a critical problem in CTOP service provision in SA. The occupied examination couches, lack of sonar machines and long queues often lead to clients leaving without having been examined to determine their gestational age. As a result clients may resort to

backstreet abortionists which places their lives in peril – Mokgethi et al (2006:38) reaffirm that maternal mortalities and morbidities are attributable to backstreet abortions while Yeboah et al (2014:144) recommend the prioritisation of CTOP services to prevent women from risking their lives by seeking illegal and unsafe methods of terminating their pregnancy.

In South Africa, to have a legal abortion in a designated health facility, it is pivotal for the client's gestational period to be confirmed via an ultrasound sonar and proper examination. The reason is that the client's gestational age determines whether she can make a booking for CTOP while still in the first trimester of her pregnancy. For second trimester CTOP doctors have to attend to the clients (Harries 2009:2). The DoH should provide basic medical equipment such as examination couches in CTOP clinics to improve the delivery of quality reproductive health services. Essential equipment should be purchased and made available for the effective and efficient management of clients' reproductive health needs which is directly linked to quality of care (Zaramba 2009:9)

Samandari, Wolf, Basnett, Hyman and Andersen (2012:6) reveal in their study access to equipment for a termination of pregnancy in Nepal is extremely problematic due to poor supply chain management processes. Exploring the procurement of medical devices in low- and middle-income settings, Diaconu, Chen, Manaseki-Holland, Cummins and Lilford (2014:2) reaffirm the findings of Samandari et al (2012) and recommend the formulation of guidelines to ensure proper equipment is purchased according to specifications for the service (in this case CTOP service) to be rendered safely. Zaramba (2009:11-13) suggest healthcare professionals should be involved in purchasing equipment for their units. Proper specifications should be submitted to purchase the correct equipment that is relevant to the unit. Equipment is viewed as a component and an investment in health which improves the quality of care (Yeboah et al. 2014:144).

Importantly though is that medical equipment is extremely costly. The management and use of equipment is important. Zaramba (2009:25) states healthcare professionals

should ensure that equipment which has been used is cleaned, properly stored and maintenance and frequent servicing of equipment will prolong its life expectancy.

Quality in health is fundamental to ensure all CTOP clients receive the best before CTOP and post CTOP treatment. CTOP facilities should have adequate supplies of MVA kits, medication, equipment and trained healthcare providers (Tesfaye & Oljira 2013:5). Also, for first-rate CTOP procedures to be carried out timely and without problems the unavailability of MVA kits is a major concern because a shortage thereof allows the pregnancy to advance to a stage beyond legal termination. Such situations encourage women to seek help from unsafe and illegal methods of terminating a pregnancy. Tumasang et al (2014:30) state the unavailability of MVA kits for CTOP services makes it difficult to render clients' expected quality of care and it actually frustrates healthcare professionals as well. The introduction of MVA kits is a positive step towards improving the quality of CTOP services (Ngo et al 2014:789). Pregnancy termination is a one-day procedure and women do not stay in hospital overnight after termination of pregnancy. The MVA kits are simple to use and women do not need to be anaesthetised. A mild analgesic is administered and the procedure is done in the CTOP clinic (Wu et al 2015:99). Chinchilla, Flores, Morales and de Gil (2014:S25) found in the Honduras the quality of CTOP services increased and better patient outcomes were achieved after starting to make use of the MVA kits for pregnancy terminations.

Having the specified and correct equipment and material resources available and at hand makes it much simpler for healthcare professionals to work faster (queues and waiting times are diminished); they are less stressed and have time to comfort patients; and a pregnancy can be terminated on time (within the first trimester). In the opinion of Koegh, Kimaro, Muganyizi, Philibin, Kahwa, Ngadaya et al (2015:11), health departments should provide basic medical equipment such as examination couches in CTOP clinics to improve the delivery of quality reproductive health services. After termination of pregnancy, clients have to rest on the same couch because health facilities do not have enough couches for clients to be moved to other couches where they can rest and be observed before being discharged (Hodes 2016:88). This practice in itself reduces the number of CTOP services rendered per day because the next client

has to wait for the previous client's rest period to expire before she can be attended to. The situation is exaggerated by the unavailability of rest rooms for clients, lack of post-CTOP rest couches and the inadequate space in CTOP units (Hodes 2016:88).

Conversely, if the essential equipment is available and accessible but the healthcare professionals are not skilled in using it optimally. According to Harries et al (2009:2) a major barrier to women accessing abortion services is "a lack of providers trained to perform abortions, hence training on the use of equipment is crucial". Zaidi, Yasmin, Hassan, Khakwani, Sami and Abbas (2014:S41) reiterate the importance of training CTOP healthcare professionals in using equipment to terminate a pregnancy. Hospital management should continuously support training in skill and knowledge on the correct use of equipment for healthcare professionals. Mutia, Kihiu and Maranga (2012:14) agree and encourage training of all healthcare professionals on the use of equipment and the ability to demonstrate proficiency in its use during evaluation. The authors emphasise that readiness to use equipment to ensure the safety of CTOP clients and the effectiveness of the service are dependent on the skill and knowledge of healthcare professionals (Mutia et al 2012:17). A study conducted by Tumasang et al (2014:29) in the Cameroon revealed that doctors were given the termination of pregnancy kits (MVA) after they completed training and their ability to use the kit was evaluated and approved.

Knowledgeable and skilled healthcare professionals are destined to provide high quality CTOP services which are essential in the reduction of maternal mortality and morbidity (Ansari, Zainullah, Mi Kim, Tappis, Kols & Currie et al 2015:8). Training of healthcare professionals on usage of equipment will prevent serious adverse events from happening. Healthcare professionals who choose to deliver CTOP services are determined to ensure they render high quality service which benefits the clients and are willing to include training in their work schedule (Romero, Maldonado, Fuentes & Prine 2015:22).

2.3.2 Human resources

Human resources refer to all the people whose collective activities are geared towards rendering quality health services to enhance health (WHO 2009:2). Personnel affiliated with health service delivery by providing health services can be defined as human resources as stated in a report of Operational Research Government of Nepal (Karki 2012:2).

On the contrary, the success and effectiveness of any programme lies in the availability of human resources to carry out the necessary activities. Human resources refer to all the people whose collective activities are geared towards rendering quality health services to enhance health (WHO 2009:2). Personnel affiliated with health service delivery by providing health services can be defined as human resources as stated in a report of Operational Research Government of Nepal (Karki 2012:2). It is always advisable to anticipate the effects that the current human resources structure in CTOP units will have on quality of care and to develop appropriate measures to maintain a high quality of care (Fenny, Hansen, Enemark, & Asante 2014:6). The stance of Ansari et al (2015:2) is that there should be a balance between human and material resources to ensure the rendering of quality CTOP services and care. In a recent study these authors conducted on post-abortion care in health facilities in Afghanistan, they found that the delivery of quality CTOP services was hampered by the limited capacity of healthcare professionals to render quality CTOP services in the health facilities.

Izumi (2012:3) states quality is associated with having adequate human resource numbers to render the required service, but the increased workload in CTOP units and the inadequate number of staff allocated causes an imbalance which compromises the quality of patient care. In fact, Pickles (2013:523) points out that several studies highlight the general lack of human resources in CTOP provision can cause a downward spiral of poor quality care leading to dissatisfaction in clients while also jeopardising CTOP mortality and morbidity rates. At every point in CTOP units nurses are essential to the running of CTOP services. Consequently, a further concern is that the impact of scarce human resources on the delivery of quality CTOP services affects even the most basic, but essential, pre- and post-care of CTOP clients (WHO 2011:12). In addition, Harries, Cooper, Strebel and Colvin (2014:2) agree with Shija et al (2011:6)

that CTOP staff shortages seriously compromise the provision of reproductive health services which constitutes an essential part of CTOP service delivery. Reduced staffing in healthcare facilities is associated with high incidences of poor patient care (Rochman 2012:46).

The South African Human Rights (SAHR) (2011:50) expects staffing analyses should be done on a regular basis to assure proper allocation of staff according to the acuity level of the unit. It is important that CTOP services should be well staffed with appropriately skilled, knowledgeable and experienced personnel who are able to deliver reproductive health services to the clients' satisfaction. But, not enough professional nurses are allocated to render CTOP services in public health facilities to ensure prompt response to the patients' reproductive health needs. The majority of CTOP services in public health facilities function with one registered professional nurse. The dilemma is therefore that the specific service is not rendered when the nurse is sick, on leave or attending a workshop. Only on rare occasions will two registered nurses be allocated to manage the CTOP services. When a complication arises one professional nurse will manage the clients with the doctors' whilst the other continues to render service to CTOP clients. Harries et al (2009:8), who did a qualitative study on healthcare providers' attitude towards termination of pregnancy in SA, report that a large number of clients are turned away due to staff shortages. Hence, the lack of human resources undermine access to a safe termination of pregnancy and, as Warriner, Wang, MyHuang, Thapa, Tamang and Shah et al (2011:377) posit, this may contribute towards women not receiving quality CTOP within the legal timeframe (up to 12 weeks gestational age) (Samandari et al 2012:8). Some consequently end up risking their lives by seeking help from illegal backstreet abortionists or make use of other unsafe methods to terminate their pregnancy (Yeboah et al 2014:144). The researcher observed that CTOP clients who are faced with this challenge use false names and addresses to gain access to other health facilities or clinics offering CTOP services resulting in overcrowding in those facilities.

The stigmatisation of some groups (for example, the Pro-life movement) as well as victimisation of nurses who render legal CTOP services by communities, individuals and

colleagues are grave obstacles to overcome (Mhlanga 2003:115,120). ‘Pro-life’ protagonists see clients who choose or nurses providing CTOP services as abortionists who kill unwanted foetuses as opposed to the ‘Pro-choice’ view that legal CTOP services help to save women’s lives (Mokgethi et al 2006:33). This opposition to legal abortion on the basis of the moral values and/or religious beliefs of groups, society, colleagues and individuals is still perceived as a barrier to “women accessing abortion services including provider opposition to abortions and a shortage of trained and willing abortion care providers” (Harries et al 2009:4).

In their study on organisational structure and nursing service management, Saini and Signh (2008:73) ascertain nursing is central to the rendering of quality healthcare and for this same reason CTOP nursing personnel must be qualified and experienced as their role in CTOP delivery requires continuously taking responsibility for increasingly complex and complicated tasks (O’Shea 2013:47). According to Mendes (2011:122), although it is recognised that CTOP services has a positive impact on women’s health as well as in the reduction of maternal mortality and morbidity, the shortage of healthcare professionals in CTOP remains a problematic issue. In 2012, Bhattacharyya, Srivastava, Avan and Graham (2012:4) found that staff shortages – in particular professional nurses – was an obstacle that could prevent the delivery of quality reproductive health services in meeting MDG 5. As known, SA did not meet the MDG target of reducing the maternal mortality and morbidity rate (MMR) to 38 maternal deaths per 100 000 live births by 2015 – although the most recent available estimates of the 269 maternal deaths per 100 000 live births for 2010 were mainly due to the HIV virus (WHO 2012:24).

Registered professional nurses and midwives are the backbone of the health system. Staffing shortages is worldwide a critical healthcare policy issue (Rochman 2012:43). In her study on health facility level and provider level influences on the provision of medication for abortion in Bihar and Jharkhand, India, Patel (2008:43) recommends increasing the number of trained healthcare professionals to increase access to safe and effective CTOP services. In SA the government’s concern regarding the level of maternal mortality is illustrated in its National Development Plan (NDP) 2030 in which

the reduction in maternal mortality is outlined as one of the main objectives to improve the health of South Africans (WHO 2012:71).

In nursing practice training, qualifications and certificates play an important role in the recruitment, selection and appointment of registered professional nurses and midwives (Saini & Singh 2008:137). In SA, nursing training is administered and regulated by the South African Nursing Council (SANC) which sets and maintains the standards of education and training as well as the legal framework to ensure CTOP nurses and midwives are capable to practice in the community (Nursing Act 33 of 2005). The standard of nursing education in SA is very high (Coetzee et al 2012:163). Advanced midwives, for example, are competent practitioners who are trained and have the skill to handle emergency procedures such as breech delivery; cord prolapse and antepartum haemorrhage (Fraser, Cooper & Nolte 2010:603). This is fortunate because doctors in public health facilities are few and the overwhelming demand for CTOP services necessitates additional training for registered professional nurses and midwives to enable them to perform quality termination of a pregnancy services in terms of CTOP Act 1 of 2008 as amended. As part of on-going training, value clarification workshops assist registered professional nurses and midwives to become acquainted with and more knowledgeable about their professional duties and responsibilities with regard to human and reproductive rights, relevant laws and policies, and the limits of conscientious objection (Turner, Hyman & Gabriel 2008:110-112; Harries et al 2009:2).

It is obligatory for registered professional nurses and midwives who work in CTOP units to undergo value clarification workshops as a strategy to improve their attitude and behaviour towards termination of pregnancy services (De Bruyn 2015:38). Although value clarification workshops are not compulsory, the benefits thereof promote attitude tolerance and improve the quality of care (Harries et al 2009:8). The aim of value clarification is to align the current health situation with the attitude, working conditions and the role of management in CTOP clinics. According to Harries (2010:112), value clarification workshops create a platform for sharing and discussing challenges relating to termination of pregnancy. Value clarification workshops help professional CTOP healthcare workers to manage and be in control no matter what problematic situation

they may be confronted with in their daily work situation (Harries et al 2009:9). Participants in a study conducted by Aniteye and Mayhew (2013:12) in Ghana affirmed that attending value clarification workshops helped them to understand their role better and changed their attitude towards Termination of pregnancy – after attending it they were able to sympathise with women who needed a termination of pregnancy. Due to such benefits, Harries et al (2009:10) recommend that value clarification workshops be sustained and extended to all healthcare professionals working in reproductive services. Voluntary attendance of value clarification workshops is important and can be fruitful because it empowers registered professional nurses and midwives with a positive attitude and motivates them to continue caring and working despite "an environment that does not conform to minimal medical standards, or both" (Srivastava et al 2013:211) and hindrances like stigmatisation and staff shortages.

Bhattacharyya et al (2012:4) mention that the difficulty of recruitment and retention of staff for CTOP services includes the lack of recognition for effort and achievement of the service. According to Faqir, Zainullah, Tappis, Mungia, Currie and Kim (2015:10), the working conditions prevailing in CTOP clinics pose a huge challenge for the recruitment and retention of staff. Dogba and Fournier (2009:6) did a study on the effect human resources have on the quality of emergency obstetric care in developing countries. These authors assert that not only do staff shortages weaken the quality of care because the increased workload prevents registered professional nurses and midwives to spend enough time with clients pre- and post-CTOP, but it also contributes towards extended waiting times for clients. An objective tool called 'work load indicators of staffing norms' (WISN) for establishing optimal staffing levels via the proper allocation of resources was developed by Musau, Nyongela, Shikhule, Birech, Kirui and Njenga et al. (2008:239). Management should use this tool to restructure the allocation of staff in CTOP clinics. The high monthly statistics are an indication of the amount of work performed in CTOP services in public health facilities. These statistics would be useful in planning for more staffing in CTOP clinics to improve productivity (Amorim Lopes, Santos Almeida & Almada-Lobo 2015:16).

In the opinion of Alameddine, Saleh, El-Jardal, Dimassi and Mourad (2012:2) human resources is a critical element of any health system and adequate numbers of well-trained and properly experienced health professionals is central to the delivery of patient-centred health services. Staffing norms should be created and it should be ensured that staff is allocated in CTOP units accordingly. Blake (2012:13) believes that appropriate staffing and meaningful recognition are relevant measures to improve quality care in CTOP services. Appropriate staffing should include the nurses' competency and expertise in order to address patients' needs.

If Blake's (2012:13) proposal for additional remuneration of the skills and knowledge of the professional nurses working in CTOP is approved and implemented, it will ensure retention of staff working as CTOP providers. The author reasons that by recognising their years of service will not only motivate nurses to continue working in CTOP clinics but will also attract new staff members thus enlarging the workforce with staff who are competent and skilled to deliver quality CTOP services.

The availability of human resources in public health facilities is influenced by several factors such as attracting and retaining health professionals, better working conditions and development to mention but a few (Pallikadavath, Singh, Ogollah, Dean & Stones 2013:27). Today the influence of patients' active involvement in their own care is another important factor to be considered (Arnetz et al 2016:1567). Permitting women to take control of their own reproductive health in an era where they are more informed and thus demand the best care possible implies registered nurses and midwives "face growing demands to increase their productivity" (Arnetz et al 2016:1567) as well as to increase their communication skills with knowledgeable clients. For this reason CTOP providers need to be skilled to understand and accept patient involvement. Epstein et al (2010) and Gulbrandsen (2014) (cited by Arnetz et al 2016:1567) confirm "there is a growing recognition of the need for attitudinal and organizational changes to accommodate patient involvement practices". Hence, the working conditions in CTOP units need to be improved in terms of aligning the infrastructure, availability of equipment as well as human and material resources in such a way that it attracts and retains professional nurses with interest in women's reproductive health. For this to

occur, health facility managers' support is essential as is their ability to recognise and award motivated professional nurses working in CTOP units. Makasa (2008:84-5) supports the allocation of adequate numbers of registered professional nurses and midwives in CTOP units to ease the workload and render quality health services by introducing incentives to retain nurses and improve the working conditions.

2.4 QUALITY OF THE PROCESSES OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

Process measure is an assessment of a series of activities that relate to safety, effectiveness, waiting time and interventions between the patient and the healthcare professional aiming to bring about improvement in health (Rao 2012:16). A study done by El Haj, Lamrini and Rais (2013:20) inform that processes are concerned with the main delivery of treatment to the patient and involves medical, psychological and emotional treatment.

CTOP processes have a specific focus in women's health which is to recognise the importance of reducing maternal morbidity and mortality. The activities that are carried out when executing CTOP services are pivotal since the ultimate aim is to bring about a difference in the woman's reproductive health status. The quality of processes of care should be appropriate and well-coordinated to enhance the effectiveness of CTOP services in public health facilities. The quality processes of the care rendered help clients to recuperate faster while the healthcare facilities maintain a reputable status (Rao 2012:32).

In the study done in India Rao (2012:17) explains that the quality of processes depends on the skill and knowledge of healthcare professionals including their adherence to guidelines and standard operating procedures thus confirming the statement of El Haj, Lamrini and Rais (2013:21) that appropriateness and skill are important in assessing the quality of health interventions. Processes of care involve interaction between users and

the healthcare structures as well as the actual delivery and receipt of care (Bulage, Sekandi, Kigenyi & Mupere 2014:2).

2.4.1 Psychological counselling

Psychological counselling forms part of CTOP services as far as the multidisciplinary team approach in the treatment of women is concerned. The termination of a pregnancy is an emotional and traumatic experience for the client. Psychological counselling is crucial in assisting and preparing the woman emotionally and mentally to make an independent and free decision without being coerced. Curley (2014:951) states healthcare professionals have an ethical obligation to identify, monitor and offer counselling to women before and after termination of pregnancy.

Counselling is best when it is offered by a qualified professional or trained person. Training in counselling is a requirement for all CTOP healthcare professionals as it helps them to develop the skill, knowledge and ability to handle critical or traumatic situations positively. Counselling helps women to deal with possible feelings of guilt experienced when they terminate a pregnancy and helps them to attain the ability to manage any situation or attitude that they may be faced with. Pre- and post-CTOP counselling is free, confidential and voluntary in accordance with CTOP Act 1 of 2008 as amended.

Women receive important information about issues of pregnancy termination and are assisted to come to terms with the choice they make. During this important session women should be offered an opportunity to ask questions and express their concerns (Nguyễni et al 2007:176-7). It is absolutely essential for privacy and confidentiality to be guaranteed and maintained during a counselling session (WHO 2003:26).

2.4.2 Contraceptives

Contraceptives are methods or systems of preventing a pregnancy (Bhat, Prabhu, Kumar & Nair 2008:157). Contraception can also be explained as an intentional attempt to prevent conception or falling pregnant by using devices or drugs (Jain & Muralidhar 2011:626). Using the Donabedian quality of care model, Shah, Wang and Bishai (2011:63) comprehensively assessed the processes of contraception provision focusing on the choice of contraceptive methods, information, and encouraging continuity and follow-up on contraception use to improve the quality of women's reproductive health.

The increasing demand for CTOP services in public health facilities are an indication that reproductive health services are faced with a challenge of preventing unwanted pregnancies. Gavin et al (2014:36) conducted a study in the USA on the provision of quality family planning services and found that the correct and consistent use of contraceptives improved reproductive health outcomes. However, the findings expressed a concern with regard to the challenges facing reproductive health services in terms of maximising the use of contraceptives by women of reproductive age.

A study conducted by Shah et al (2011:64) in Ethiopia and Pakistan reveal the extent of reproductive health problems experienced in developing countries is significantly influenced by the large economic inequalities leading to large inequities in the use of modern contraceptive methods. Shah et al (2011:64) therefore argue that the limited availability of a variety of contraceptive methods and healthcare professionals' lack of contraception knowledge are barriers in achieving quality use of contraceptives among women.

Shah et al (2014:S41) also did a study in Bangladesh, India which reveals an increase in illegal and unsafe termination of pregnancies was probably due to the low quality of government termination of pregnancy services and the high charges for such services which were supposed to be free. It was further revealed that the repeat termination of pregnancy rate was high signalling the importance of post termination of pregnancy contraceptive counselling. In SA, the government offers CTOP services and contraceptives free in public health facilities to ensure even the poorest of the poor is afforded this service. The consistent use of contraceptives plays an important role in

improving the quality of women's reproductive health during childbearing age Shah et al. (2011:63). The guideline childbearing age is perceived to be between the ages of 15 – 49 years; however women can have children earlier or later than indicated (Chivese, Mahmoud, Magodoro, Kengne, Norris & Levitt 2016:2).

While striving to achieve MDG 5 goal, namely to reduce maternal morbidity and mortality caused by making use of illegal methods to terminate a pregnancy, the demand for legal termination of pregnancy services is on the rise reflecting the low use of contraceptives (Arambepola, Rajapaska & Galwaduge 2014:8). Importantly, the termination of pregnancy service should under no circumstances be used or encouraged as a contraception method; clients should be encouraged to use approved medical contraceptive devices and methods to prevent an unwanted pregnancy (Bhat et al 2008:157). In the study they conducted in Viet Nam, Nguyễni et al (2007:172) discovered improving women's reproductive health was closely relatedly and to a large extent depended on them receiving information and counselling on reproductive health issues and the use of contraceptives. Zaidi, Yasmin, Hassan, Khakwani, Sami and Abbas (2014:S41) support immediate post-CTOP counselling on family planning and deciding on an appropriate contraceptive method to prevent repeat and unwanted pregnancies.

A variety of contraceptive methods are available in healthcare facilities ranging from pills, injectables, devices, implants and more permanent methods such as female sterilisation. According to Donabedian (2003 cited by Walker 2009:18), the concept of quality can be incorporated during the process of giving the client information about the available contraceptive methods. Healthcare professionals should give clients enough information on contraceptives and assist them to choose a suitable method of contraception before leaving the health facility post termination of pregnancy (WHO 2003:45). Providing clients with sufficient information and explaining to them in a way which they understand the advantage of contraceptive use is vital. Assisting clients with information about suitable contraceptives immediately after a CTOP is reaffirmed by Zaidi et al (2014:S43) in whose opinion the safest and most effective technique to

prevent unintended pregnancies is for clients to be started on some form of contraception as early as possible.

The use of contraceptives post-CTOP is encouraged and they should be informed about contraceptive use to prevent unwanted pregnancies. Knowles, Bales, Loi, Quang Cuong, Mai Oanh and Luong (2007:57) support the use of contraceptives by women because it is a cost-effective intervention in preventing unwanted pregnancies and, importantly, it is a pro-active step towards teaching women that repeat abortions is not the way to prevent having another child. The health benefits associated with the use of contraceptives have a positive impact on the woman’s life and that of her family and of society at large. Mubita-Ngoma and Kadantu (2010:18) state the use of contraceptives improves the quality of women’s reproductive health by averting unwanted pregnancies and maternal mortality and morbidity.

The high numbers of CTOP service requests indicate noncompliance with the use of contraceptives by women citing weight gain as a reason to discontinue the use of hormonal contraceptives (Jacobstein & Polis 2014:798). Public health facilities have introduced the Implanon implant (which is inserted sub-dermal after termination of a pregnancy) in a bid to prevent unwanted pregnancies and repeat pregnancy terminations. The study conducted by Jacobstein (2014:796) recommends the Implanon implant citing its high effectiveness level in preventing unwanted pregnancies, saving women’s lives and improving the health and well-being of women. Jacobstein and Stanley (2013:11) go as far as guaranteeing the Implanon implant is an effective contraceptive method and its’ suitability for women of all ages.

Conversely, women using the Implanon implant have reported many side effects such as severe headache, nausea, vomiting, skin rash and heavy bleeding. Alemayehu, Belachew and Tilahum (2012:12), for example, found women reported that the implant can cause irregular bleeding, some complained of experiencing pain during insertion and removal while others reported they had conceived despite having had the Implanon implant which resulted in another termination of pregnancy. Unexpectedly falling pregnant with the Implanon implant still in place was reported by Rowlands and Searle

(2010:81). The authors report that in 1999 some women in the Netherlands became pregnant with the Implanon implant in situ. While some of them opted for termination of pregnancy others decided to continue with the pregnancy and delivered babies. A court case followed and in 2005 the manufacturing company, Organon as well as the attending doctors were found to be liable for unintended pregnancies and both the doctors and Organon had to pay compensation (Rowlands 2010:8).

Antiretroviral treatment (ART) regimens for HIV and tuberculosis (TB) and certain drugs used for epilepsy reportedly interfere with the effectiveness of the Implanon implant. Robinson et al. (2012:11-12) report their concern regarding women in their study who conceived while on antiretroviral (ARV) drugs with the Implanon implant in situ and the authors recommended for women to use alternative contraceptive methods to ensure protection. The DoH subsequently issued a circular in October 2014 recommending that women on HIV, TB and epilepsy treatment should not make use of the Implanon implant but rather choose other methods of contraception such as intrauterine devices and/or monthly injections. The DoH further recommended for the implant to be removed and an alternative method be used for the duration of the HIV, TB and epilepsy treatment (Circular – changes in the prescription of Implanon DoH 16 October 2014).

Implanon implants are reported to migrate from the point of insertion in the body to other areas and even to the heart which can cause death. This aspect renders the Implanon implant a risk because if it has migrated it would have to be removed surgically (Kim, Seo, Song, Suh, Yoon & Ryu et al 2012:603; Rowlands & Searle 2010:79). It seems as if many CTOP clients do not favour the Implanon implant because it has been found that after having it inserted in one public health facility they have it removed in another public health facility citing heavy bleeding as the reason. In the opinion of Kumar et al (2004:55), healthcare professionals at CTOP clinics lack either the time or training (or both) to provide contraceptive counselling to clients post termination of pregnancy to fully inform clients of the advantages and disadvantages of the Implanon implant which is an unacceptable situation. The authors therefore suggest that the role of informing CTOP clients be assigned to a CTOP specialist outreach nurse who can properly and in

detail inform post-CTOP clients on the Implanon implant and all contraceptives available.

2.4.3 Booking system

The increased demand for CTOP services requires strategies to improve the quality of CTOP services rendered to meet and satisfy the needs of clients. CTOP services need to develop ways of managing overcrowding and the long queues to improve the quality of service delivery. In the view of Hye-Sook Ham, Peck, Moon and Yeom (2015:5) efforts made to respond to changes of healthcare demands in a flexible way will benefit the health system. A booking system should be established that takes into consideration factors that are favourable for both the clients and the healthcare professionals. According to Dharmadhikari and Zhang (2013:196), a booking system controls efficiency and appropriate access to CTOP services which are associated with client satisfaction.

Although a proper booking system allows healthcare professionals enough time to prepare properly for the client to be seen, it has both advantages and disadvantages. A booking system reduces waiting time and allows clients to choose times that are suitable to them for consultation as stated by Lawton, Rose, Pullon, Stanley, Garrett and Sykes et al (2014:91). This kind of approach increases client satisfaction and improves client outcomes in CTOP services. However, for the booking system to work fruitfully clients must honour appointments made. Clients who do not honour secured appointments lead to healthcare professionals loitering about while rescheduling of clients. Such a situation can be detrimental to the public health facility including the nurses allocated to the unit because time is wasted. A booking system allows for emergency clients to be consulted as and when they come in.

Samandari et al (2012:9) found in the study they conducted in Nepal that CTOP clients are made to wait for long periods of time in public health facilities while other clients considered more urgent are attended to indicating that CTOP is not a priority service.

Women's rights need to be protected by prioritising termination of pregnancy. To Bateman (2011:303) a booking system is not user-friendly to women seeking termination of pregnancy because they are made to go through long processes before they are assisted.

It is a cause for concern that CTOP services in public health facilities are overwhelmed with requests for terminating a pregnancy. Although a booking system will control the number of clients to be serviced daily, it can also be to the disadvantage of other clients if available dates for booking their CTOP can only be made for when their pregnancies have progressed beyond termination dates. Pickles (2013:520) asserts that women seeking termination of pregnancy often times waited long before being attended to and some had to visit the CTOP clinic several times before they could secure a date. A study by Huang and Zuniga (2012:819) states a booking system will improve the quality of service delivery in a cost-effective way by determining the number of clients to be seen daily.

Additionally, using the booking system will enable healthcare professionals to terminate pregnancies timely without them advancing in gestational age while on a waiting list. CTOP clients must honour their appointment to ensure quality services are rendered. Careful assessment of clients is done and each case is attended based on its own merit. According to Sandbaek, Helgheim, Larsen and Fasting (2014:6), an appropriate booking system will allow effective use of CTOP services by reducing long waiting times and queues.

In their study discussion, Hye-Sook Ham et al (2015:4) point out that short waiting times improve the quality of care and are convenient for clients. All designated CTOP clinics should be fully functional to reduce the waiting time, long queues and overcrowding. Huang and Zuniga (2012:812) state a booking system benefit clients by reducing waiting time, increasing access and the quality of processes in public health facilities. Healthcare providers also benefit when a booking system is used in that they are afforded enough time to plan and organise for quality delivery of CTOP services.

Effective and efficient management of CTOP services satisfy clients and improve the quality of service delivery. Client and staff satisfaction are increased when a booking system is used because it allows a certain number of clients to be seen. A booking system further recognises training opportunities for healthcare professionals who improve their skills and knowledge to reduce complaints (Sandbaek et al 2014:8).

Hye-Sook Ham et al (2015:5) conclude in their study that a booking system improves convenience for the clients, provides comfortable waiting times and enough time for healthcare professionals to give adequate information about the processes of the CTOP services, to answer questions from clients, clarify concerns and build lasting relationships. Conversely, the booking system is criticised in other areas because it allows a pregnancy to advance beyond the allowed 12-week gestation stage for a CTOP. This then results in women seeking illegal and unsafe methods of terminating their pregnancy. A study by Bateman (2011:303) confirms the difficulties that women have to endure by being made to wait for a booking clerk, then waiting for the sonar doctor and by the time they can receive assistance, their pregnancy is advanced.

A study Silva, Ashton and McNeill (2011:84) conducted in public health facilities in New Zealand found that women waited 25 days from the time of making a booking until termination of pregnancy could be done. Strategies to improve waiting times are necessary to ensure quality CTOP services are rendered to meet the expectations of the clients.

2.4.5 Referrals

A referral is the action of transferring responsibility of patient care from one healthcare professional or facility to another when there are no sufficient resources at their disposal to manage the patients' condition (Senitan, Alhaiti, Gillespie, Alotaibi & Lenon 2017:2). A referral also implies a recommendation made by one healthcare practitioner to have a patient seen by another doctor for further treatment. Healthcare professionals should be able to refer clients needing termination of pregnancy to a designated site where they

will receive comprehensive care. Simmonds and Likis (2011:794) state professional responsibilities when providing quality care to CTOP clients include appropriate referrals for desired services which is an essential component of reproductive healthcare.

The quality of the referral system is crucial in preventing illegal and unsafe methods of terminating a pregnancy. Samandari et al (2012:9 of 11) support the notion that women who wish to terminate their pregnancy should be referred as it is a means of exercising their reproductive right. Healthcare professionals should therefore have a broad knowledge on reproductive health services in order to refer CTOP clients correctly to avoid delays. Ghebrehiwet, Sharan, Rogo, Gebreamlak, Haile and Gaim et al (2008:13) assert a referral system is a strategy which relies on availability and cost of transport including the distance to reach the facility on time to prevent a health complication.

Healthcare professionals need to familiarise themselves with the referral system to correctly direct CTOP clients where to get assistance. According to Pickles (2013:519), ineffective referral systems cause delays for women's access to CTOP services. The author posits that the situation is worsened by fact that there is inadequate knowledge of the CTOP Acts (92 of 1996; 1 of 2008 as amended). The shortage of CTOP healthcare providers and poor adherence to the referral system causes failure of the referral system (WHO 2015:20).

A well-structured and effective referral system is necessary for the provision of safe termination of pregnancies. According to Donabedian's model of quality care, access to referral and continuity of care are included in the measuring quality of health services (Donabedian 2003:44). Women who need termination of pregnancy have to be referred to clinics for appropriate treatment on time – it is vital for the healthcare personnel rendering CTOP service to understand and acknowledge the urgency of such cases and they should therefore do their utmost to accommodate and support these women by ensuring they are referred as soon as possible to avoid them seeking the help of illegal abortionists (WHO 2003:64). Arakawa, Arcệncio, Scatolin, Scatena, Ruffino-Netto and Villa (2011:1000) confirm the importance of referral by stating that referral systems maintain regular control of consultations and guaranteed follow-up of treatment for

clients. The referral system has a further advantage in that certain CTOP clients prefer to go to health services situated far from their homes due to the stigma associated with termination of pregnancy.

According to Downie and Nassar (2007:161), CTOP services should be available without referral notes because it is a free and legalised service offered in public health facilities. Referral of clients is important for continuity of care and feedback should be given to the referring health facility. Cevasco and Ashley (2011:49) support the referral system because it improves the quality of care by reducing maternal morbidity and mortality. Jiwa, Arnet, Bulsara, Ee and Harwood (2009:35) emphasise the importance of timely referrals, diagnosis of clients and urgent access to a health facility as key factors in improving quality of CTOP services.

A good referral system increases the effectiveness of the CTOP service and reduces the use of unsafe and illegal methods of abortion. Under normal practice, a referral system follows a certain procedure. The referring healthcare professional or facility makes a telephone call to the facility the client is referred to. A discussion of the client's condition follows. After establishing access to the facility she is referred to, she is then sent to the latter for further treatment either by going there herself or by ambulance depending on her condition. According to the WHO (2013:35), there are challenges with regard to establishing and maintaining referral networks to enable timely access and continuity of quality care.

Onziga et al. (2011:35) found the record keeping with regard to the referral system in Uganda was totally inadequate. It is essential with referrals that record keeping is up to date and that all referral records reflect information on reasons for referrals to enable follow-up of clients for feedback results. An effective referral system ensures a close relationship of care and helps clients receive the best quality service; it should be monitored for continued improvement in quality of care. A study by Muchedzi, Chandisarewa, Keatinge, Stranix-Chibanda, Woelk and Mbizvo et al (2010:6) in Zimbabwe identified a poor referral system as a barrier to access of quality reproductive health services.

2.5 THE QUALITY OF THE OUTCOMES OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

Outcomes are used in the Donabedian triangle of assessing quality in health facilities as the end results of health interventions and assist in identifying aspects of service delivery that need to be improved (Hush, Cameron & Mackey 2011:25). Outcomes are more concerned with measuring staff attitude, client satisfaction, safety and security, and the effectiveness and efficiency of care rendered. According to Tunçalp, Were, MacLennan, Oladapo, Bahl and Daelmans et al (2015:1045), quality outcomes require effective clinical and nonclinical interventions, optimum skills and for healthcare workers' attitude to improve positively. Outcomes are influenced by the experience of clients when receiving care in healthcare facilities.

2.5.1 Staff attitude

An attitude is a mental position with regard to a fact, state, feeling or emotion towards a situation (Merriam Webster's online dictionary). Chaiklin (2011:33) defines attitudes as negative behaviours towards clients. Magowe et al (2016:111) summarises the expectations that patients have of the attitude of nurses as well as how nurse leaders believe nurses should operate as follows:

Respondents indicated that they expected a nurse/midwife to be most receptive and welcoming to patients. She/he must be kind, calm and collected even during times of emergency or when patients are scared or upset. They are expected to be polite, respectful, sympathetic, responsive and timely in carrying out nursing duties. Nurse leaders also concurred with these expectations. They added the observational role, that the nurse must be alert and observe changes in patient behaviour and take appropriate action (Magowe et al 2016:111).

Obviously, the attitude of CTOP providers is one of the most vital factors when assessing client outcomes in a CTOP health facility because the latter’s behaviour impacts directly on the quality of and accessibility to CTOP services. Nurses’ positive attitude together with their comforting and calm presence builds trust between clients and healthcare professionals in a health facility. According to Mokgethi et al (2006:38), professional nurses must respect the rights of women who choose CTOP services because the “philosophy of nursing is about caring”. Registered professional nurses and midwives working in CTOP services should always remember their pledge of service; it is a promise they undertook to respect the dignity and religious beliefs of patients under their care at all times (Nurses pledge of service). Taking this pledge means healthcare professionals take an oath to refrain from demonstrating actions or behaviours which may endanger the life and health of a patient. The pledge of service encourages nurses to have a positive attitude at all times when rendering health services (Miya 2008:9).

Also, stigmatisation is still very much associated with women who choose to terminate their pregnancy as well as registered nurses who work in the CTOP unit. For this reason, staff who have the knowledge, skill and professional maturity to deal with such animosity and who can comfort and support clients who are victims of stigmatisation can be of great benefit to the CTOP patients, colleagues, the CTOP unit as well as the health facility. Demonstrating a positive attitude means the attending nurse understands and empathises with the client (Mousavi, Pottal & Podder 2014:19).

The WHO (2015:27) states value clarification workshops are used to prepare and increase support for healthcare professional to provide CTOP services with a positive attitude. However, healthcare professionals also require emotional support from managers, psychologists and/or a priest or church leader to support them when they experience work trauma. Harries et al. (2009:6) found CTOP healthcare providers experienced stigmatisation and isolation as highly antagonistic behaviours from colleagues; some experienced burnout due to staff shortages while others “found it more traumatic to deal with a termination performed around 17–20 weeks, than a termination at 14 weeks, because with the latter, one was dealing with an embryonic

sac rather than a “formed foetus” (Harries et al 2009:7). Unfortunately, this critical support system for CTOP nurses is often not available.

Value clarification workshops are recommended to assist healthcare professionals to focus on rendering CTOP services with positivity and understanding. A study conducted in Nigeria by Lamina (2013:407) indicates that value clarification workshops are limited due to the restrictive nature of the CTOP Act in the country. Harries et al (2009:8) explain value clarification workshops were introduced in South Africa shortly after the implementation of the new CTOP (1 of 2008). Facilitated by international NGOs such as Ipas in collaboration with local health departments, the value clarification workshops were incorporated into the termination of pregnancy programme. The aim was to give healthcare providers and other key stakeholders an opportunity to “clarify their values and attitudes and engender changes in attitude and behaviour towards women seeking an abortion” (Harries et al 2009:8). Although the value clarification workshops were experienced as positive and helping nurses who were opposed to abortion to view it from a different perspective in that they fulfilled a guiding rather than directing role, nurses felt it would be more beneficial if it was presented as a stand-alone workshop to address attitude barriers towards the provision of CTOP services. It was also to form a forum for CTOP providers to reflect on CTOP challenges on a professional and personal level with coleagues (Harries 2010:26).

Rehnström Loi, Gemzell-Danielsson, Faxelid and Klingberg-Allvin (2015:2) posit that staff attitude may discourage clients to access CTOP services thus encouraging women to seek illegal and unsafe abortions methods. Puri, Lamichhane, Harken, Blum, Harper and Darney et al (2012:8) who did research in Nepal report that Nepalese women seeking termination of pregnancy did not experience supportive treatment from healthcare professionals. Nurses working in CTOP services need to be supported to deal with ethical issues and improve their attitude towards clients. Dalal, Bala and Chauhan (2014:256) propose the creation of training opportunities to enhance the attitude of CTOP nurses. The authors suggest value clarification workshops will assist healthcare professionals to maintain balance between their personal beliefs and professional responsibilities (Puri et al 2012:8).

The majority of healthcare professionals working in CTOP units feel lonely and isolated – the CTOP unit in health facilities are often stigmatised and the nurses working there have nobody except some co-workers to share feelings and experiences with. It has become a negative experience to work in a CTOP unit because one feels like an outcast (Gilbert 2013:105). Regular psychological debriefing sessions are essential for healthcare professionals working in CTOP units. Mamabolo and Tjallinks (2010:82) suggest on-going counselling sessions for healthcare professionals working in CTOP units to help them perform optimally as required by their professional standards.

Mamabolo and Tjallinks (2010:80) found that healthcare professionals working in CTOP units are not supported by colleagues and management in public health facilities. There is a profound need to equip healthcare professionals working in CTOP services with technical, interpersonal and communication skills to improve the relationship between clients and nurses including colleagues in health facilities (Rehnström Loi et al 2015:10).

2.5.2 Client satisfaction

Client satisfaction is defined as an achieved outcome reporting on the success of having met the clients' expectations and the experience of the service rendered (Suhonen, Papastavrou, Efstathiou, Tsangari, Jarasova and Leino-Kilpi et al 2012:374). Client satisfaction is the core component of quality in healthcare services in that it is a form of feedback indicating how well the clients experience the service rendered. A study Wambua, Mbayaki, Munyao, Kabue, Mulindi and Change et al (2015:668) did in Kenya indicates that client satisfaction should be monitored closely because it determines the adequacy of needs met when receiving healthcare service in a health facility.

According to Mosadeghard (2014:210), Donabedian links client satisfaction to multiple dimensions of quality assessment which includes communication, respect, health facility environment and healthcare professionals' relationships with clients regarding service

delivery. Wambua et al (2015:668) found in their study that clients were more satisfied with two factors, namely waiting time and duration of consultation in private health facilities than in public health facilities. Clients' dissatisfaction with services is indicative of the challenges faced by public health facilities with regard to inadequate resources to render quality healthcare services. Fikru, Mirkuziea and Megerssa (2013:245) state quality is an essential element which attracts and retains clients and it is directly linked to client satisfaction. According to Eshetu Gobena, Mengeste and Semahegn (2013:10), client satisfaction is an important indicator of the measurement of quality of a healthcare facility.

Client satisfaction is important in determining clients' future visits to the same facility. These follow-up visits are acutely related to treatment adherence and improving women's health status. The study by Fikru et al. (2013:246) reflects that client satisfaction is related to their future utilisation of healthcare services. The quality of CTOP services in public health facilities should improve to ensure client satisfaction which plays a role in clients honouring follow-up dates and adherence to treatment. Wambua et al. (2015:668) also found that client satisfaction is associated with adherence to treatment regimens which eventually improves the client's health status. Adeyinka, Jikic, McGarvey, Muasau-Howard, Faiai & Hawley (2017:13) report that client satisfaction is an outcome of service experience which tends to include structure and process as quality components of care.

Client satisfaction can be used as a mirror for health facilities to measure their quality of care as well as the desire to strive for improvement to meet and satisfy clients' needs. Client satisfaction is an important quality measure in CTOP services because it informs the healthcare professionals on how well they succeeded – or failed – to meet the client's expectation of healthcare delivery. Ofili (2014:26) states client satisfaction is critical in developing client-focused services and assuring the clients' opinions are considered for quality improvement. Women experience the termination of their pregnancy as stressful and emotionally upsetting. Therefore, being welcomed in a warm and understanding manner by healthcare professionals allows them to relax, to feel free to open up and share their feelings and experiences with the healthcare professionals.

Having more knowledge of the client's lifestyle and background assists healthcare professionals to plan the woman's future reproductive health treatment.

The quality of the delivery of health services encompasses a number of factors such as waiting time, examination, counselling and information sharing regarding the processes to determine client satisfaction (Fikru et al 2013:252). In the opinion of Ogunfowokan and Mora (2012:2), healthcare professionals can improve client satisfaction by meeting clients' expectations with regard to improved waiting time. Client satisfaction relates to a feeling of pleasure which results from receiving services rendered as expected; if clients are satisfied with the outcomes of services it makes them feel positive and fulfilled.

A study by Wu et al (2015:103) indicates that women who had their pregnancies terminated were highly satisfied with the service rendered. However, as observed by Kimport, Cockrill and Weitz (2012:208), not all clients are satisfied. These authors found CTOP clients expressed that the environment made them feel lonely and isolated instead of experiencing a feeling of being 'safe' and surrounded by caring and compassionate healthcare personnel.

It is of utmost importance that clients are informed about the processes in the CTOP clinic. They must know what to expect, must understand the processes and must be given the opportunity to ask questions if they want to. Counselling is part of treatment when terminating a pregnancy and it should be encouraged. Eshetu et al (2013:9) found that communication is a priority when the objective is client satisfaction. Communication is especially important during information giving and counselling session. According to the Donabedian model of quality care, processes include communication as a vital part of the treatment and measurement of quality services. Klingberg-Allvin (2007:45) indicates in her study that communication between clients and healthcare professionals which reflects respect and sensitivity towards the clients' needs has a calming effect on the latter which helps them to provide relevant and necessary information to the healthcare professional.

Client satisfaction encourages the regular use of health facilities which benefits the clients in that they know their health status. Nair, Yoshida, Lambrechts, Boschi-Pinto,

Bose and Mason et al (2014:13) state clients' satisfaction with healthcare facilities influences not only their utilisation of health services but also empowers them to be in control of their own health.

2.5.3 Safety and security

Women from all over the world gathered in Beijing, in China to discuss their safety and security in matters of reproductive health including termination of pregnancy (The Beijing Declaration and Platform for Action 1995). Their efforts were recognised and accepted at the ICPD allowing them to enjoy the freedom of choice in reproductive health matters including termination of pregnancy. Shah et al (2014:20) state the removal of barriers pertaining to the much debated issue of pregnancy termination provided safety and security to women as they were legally allowed to take control of their own reproductive health.

The safety and security of women terminating a pregnancy is regarded as a quality measure in health because it ensures that they are protected from harm. Gaining access into a public health facility does not always guarantee safety from intimidation and humiliation by healthcare professionals. A study by Lamina (2013:401) reveals that in Nigeria termination of pregnancy is still restricted; Nigerian women do not have access to legal termination of pregnancy services like in South Africa. Consequently, pregnant Nigerian women risk their lives by seeking unsafe and/or illegal methods to abort an unintended pregnancy.

McCarthy (2014:17) reports that delaying medical care to a woman requiring termination of pregnancy is not a safe practice because it jeopardises the woman's life. Healthcare professionals should be empathetic and not judgemental towards women seeking termination of pregnancy. They should act within their respective scopes of practice to ensure the reproductive rights of all women are guaranteed (Pereira, Taquette & Pérez 2013:2). The state or government of a country is obligated to promote and protect a woman's right to health, liberty and security (McCarthy 2014:16).

Access to safe and legal termination of pregnancy services is fundamental to the reduction of maternal mortality and morbidity. Lin and Liang (2007:20) state client safety is a compelling concern in the healthcare system. Safety is a woman's human right. Encapsulated in this right is the right for women to be allowed access to quality CTOP services in public health facilities. Hughes (2008:VI) emphasises safety in healthcare delivery encompasses the ethical responsibility of the facility and staff to protect clients and to prevent any physical or emotional harm befalling them during healthcare services delivery.

The legalisation of termination of pregnancy by governments is a step towards providing safety and security to women's reproductive health (CTOP Act 1 of 2008). The use of safe and reliable medical methods to terminate a pregnancy is regarded as a safety measure towards woman's health. Health facilities should provide a secure environment for women to access termination of pregnancy services.

Termination of pregnancy procedures are performed by qualified professionals in a clean and sterile environment; this renders women free from infection and other complications (CTOP Act 1 of 2008). To strengthen the safety and security of women undergoing CTOP services in South Africa, the DoH provides disposable sterile manual vacuum aspiration (MVA) sets to perform the procedure. The availability of doctors in health facilities is seen as a measure of providing safety and security to clients.

A study by Izugbara, Egese and Okele (2015:10) conducted in Kenya revealed that women assess safety in CTOP services on the basis of the healthcare professionals' ability to safeguard their termination of pregnancy secret. In SA the SANC Act (33 of 2005) plays an important role in the registration of nurses to practice only after they have met all the requirements to ensure that clients receive safe treatment in a secure environment. Shah et al (2014:17) mention that a safe termination of pregnancy is attributed to applying the relevant policies, protocols and standards correctly and efficiently.

The provision of trained healthcare professionals to procure termination of pregnancy is a strong measure in providing safety to women. The WHO (2012:65) states termination

of pregnancy can be safe when provided by properly trained healthcare providers. Termination of pregnancy services is governed by the CTOP Act (1 of 2008) which promotes the use of safe, effective and affordable methods (Mendes & Basu 2010:614). The Constitution of the country (Act 108 of 1996) ensures safety and security of women by making available CTOP services to all women residing in SA.

Barot (2011:25) emphasises that access to termination of pregnancy through the formal health system is highly safe. In fact, CTOP services are expected to be safe because the aim is to reduce the maternal morbidity and mortality especially among women who make use of illegal and unsafe methods of abortion. Registered professional nurses and midwives are encouraged to undergo additional training to procure CTOP in public health facilities which is in line with the Nursing Act (33 of 2005) and CTOP Acts (92 of 1996; 1 of 2008). The Acts mentioned are part of the measures taken at national level to provide safety and security for women concerning matters of reproductive health.

According to Tvedt et al (2013:762), the work environment, staffing levels, educational level and skills mix of health professionals play an important role in client safety and security. The most critical element is the distribution of human resources which is central to quality of care and client safety. Client safety needs to be effective, timely and efficient to prevent termination of pregnancy clients from harm.

2.5.4 Effectiveness and efficiency

Assessing quality is important to determine the effectiveness and efficiency of CTOP services in terms of rendering quality healthcare to women. According to Arscott-Mills, Hobson and Morgan (2014:2), effectiveness means delivering care that results in improved health outcomes for individuals and communities as identified by the World Health Organization (WHO 2006:9). Donabedian (2003 in Grimmer, Lizarondo, Kumar, Bell, Buist & Weinstein 2014:5) assert effectiveness and efficiency are pillars of quality. In CTOP services effectiveness means that the interventions achieve the desired outcomes leaving the client satisfied.

For healthcare to be of quality and effective it should meet the clients' expectations and needs. CTOP services should perform well on the dimensions of effectiveness and efficiency to satisfy their clients (Mosadeghrad 2012:259). Donabedian established effectiveness and efficiency as attributes for measuring quality of healthcare programmes such as CTOP (de Lima Lopes, Pereira Cardoso, de Souza Alves & D'Innocenzo 2009:137).

Effective means to produce the desired results or having an intended effect related to the outcomes of the quality of CTOP services (Burgess 2012:11). CTOP services are effective in terms of offering and delivering the service and being accessible. The outcomes which are safe and legal methods of terminating a pregnancy are an indication of the effectiveness of the CTOP services. The absence of negative reports from the CTOP services is an indication that the service is effective and efficient.

Efficiency is defined in terms of the availability of resources, its utilisation and the outcomes produced (Binder & Rudolph 2009:809). In South African health facilities CTOP services are available and are flooded with women needing the service. Mosadeghrad (2012:254) states efficiency is the extent to which resources are used to achieve given results. CTOP services are efficient in terms of rendering quality services that are without complications, free and affordable even to the poor. In the opinion of Arscott-Mills et al (2014:2), efficiency is embedded in the utilisation of resources to the maximum**.** CTOP services are efficient because they serve all women residing in SA as per CTOP Act 1 of 2008. However the impact of infrastructure renders CTOP services inefficient since women in rural areas lack access to this free service. The CTOP service is free yet the poorest of the poor in rural areas cannot afford to pay travel costs to access thew service in the urban areas (Ilboudo, Greco, Sundby & Torsvik 2014:6).

Adeyinka et al (2017:2) states clients have an impact on the health system efficiency in terms of compliance, missing appointments and presenting on time for treatment reflecting on the use of health resources. Donabedian's model of quality care triangle is comprehensive in that each of the elements used in the assessment of quality affects

the results of the other. Therefore, the three elements should be balanced in a health facility to ensure quality of care is not compromised.

2.5.5 Self-esteem of clients

According to psychologist Abraham Maslow's hierarchy of human needs, self-esteem includes two aspects: the need for self-esteem and for the esteem a person gets from others. Jerome (2013:42) explains this need as follows:

Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. When these needs are frustrated, the person feels inferior, weak, helpless and worthless (Jerome 2013:42).

Cant (2013:45) reaffirms self-esteem transpires when an individual experiences a total sense of well-being and this can only be achieved when his or her desire for recognition and respect is fulfilled. Thus, when it comes to matters of reproductive health, women need to have a strong sense of self-esteem to respect the choices they make. Valuing themselves allows them to understand the reasons for making choices which may not satisfy others. On the contrary, they need others to respect their choices. Importantly, Arslan's (2009:557) view that self-esteem is an attitude which can be developed is of significance to women who choose to have a CTOP in spite of stigmatisation, victimisation and the emotional hurt they may suffer.

Although Warren, Harvey and Henderson (2010:233) acknowledge all women to some extent respond in a psychological and emotional manner towards termination of pregnancy, the interpretation of these authors is that termination of pregnancy does not cause low self-esteem in women. Warren et al (2010:233) found no association between termination of pregnancy and self-esteem in their study. However, their findings did indicate that women who have a low self-esteem prior to termination of a pregnancy might continue suffering with the same feeling of self-worthlessness post-

termination. Therefore, the authors suggest that in many cases there is no connection between existing lowered self-esteem and the termination of pregnancy.

Not all women's self-esteem is affected by termination of pregnancy. Wilson and Haynie (2007:4) argue that it is rather the events leading to a woman becoming unintentionally pregnant and her reasons for deciding on terminating the pregnancy which have different effects on the woman's emotional state. These authors posit that women who make an informed decision to terminate the pregnancy usually do not experience any negative effects; they do not link their decision to a low self-esteem but consider and accept their choice as a part of their reality (Wilson & Haynie 2007:4).

The majority of women who choose to terminate their pregnancy experience relief; a woman with high self-esteem who chooses to have a CTOP will not feel guilty or sad after the procedure (Curley 2014:646). No studies were found on the impact terminating a pregnancy has on measuring mood, anxiety or stress disorder in terms of CTOP services. Conversely, individuals with low self-esteem become more negative when faced with unfavourable situations. It can therefore be posited that individuals with low self-esteem may lack emotional strength and coping mechanisms when faced with real life situations. The stance of Major et al. (2009:866) on a woman's decision to choose termination of pregnancy is that psychological, social and physical factors play a significant role when making the choice. Counselling is crucial at this stage to assist the woman consider all options and then to make a decision that is right for her in her circumstances. This means she makes her own choice and it therefore builds her self-confidence.

A study by Pourreza and Babeti (2011:32) confirms that termination of pregnancy is seen as a solution providing emotional relief to women who are faced with an unwanted or unintended pregnancy. Pourreza and Babeti (2011:35) elaborate on the issue of self-esteem by stating women already presenting with low self-esteem might become depressed, have a fear of not conceiving again, develop eating disorders, start to abuse drugs, indulge in smoking, and develop extreme feelings of guilt (even attempting suicide) as psychological consequences of terminating their pregnancies. Therefore,

psychological counselling is vital prior to the termination of pregnancy to identify and assist clients who present with low self-esteem. In fact, Curley (2014:947) theorises that mental health problems presenting after termination of pregnancy are incidental with having mental health problems preceding the termination of pregnancy.

A woman who demonstrates mental strength and courage to emotionally manage the termination of an unintended pregnancy exhibits a high level of self-esteem. She made an independent decision; she demonstrated possessing an effective coping skill in her given situation by placing her own health and well-being first and consequently she feels satisfied. The findings of a study done by Biggs, Upadhyay, Steinberg and Foster (2014: 2505) on whether abortion reduces self-esteem and life satisfaction show that self-esteem in women who chose to terminate their pregnancies improved whereas in women who decided against pregnancy termination, self-worth and self-esteem seemed to wane. CTOP healthcare professionals have to assist women who need to terminate a pregnancy to improve their self-esteem by displaying a positive attitude at all times; they have to advocate for these women against “ill treatment and exploitation” from other healthcare workers (Seboni, Magowe, Uys, Suh, Djeko & Moumouni 2013:9).

A need exists for CTOP healthcare professionals to be trained on how to deal with a women’s reproductive health needs in a positive way to improve their self-esteem. Curley (2014:951) suggests for the development of health education strategies within the school-based programme to identify risks associated with reproductive health decision making before pregnancy occurs or a student becomes sexually active to build self-esteem. Knowledge about reproductive health issues is powerful; having knowledge and insight can set a woman free from an unwanted pregnancy. Klingberg-Allvin (2007:35) raised a concern in her study about the limited access to contraceptives and reproductive health information which are critical aspects of any endeavour aimed at assisting a woman to improve her self-esteem, self-value and feeling of worthiness.

2.5.6 Self actualisation

Self-actualisation is Maslow's fifth and highest need for self-fulfilment. Maslow describes this need as "a person's need to be and do that which the person was "born to do." "A musician must make music, an artist must paint, and a poet must write."(Jerome 2013:42). Self-fulfilment is to realise ones' own capabilities and betterment of oneself by achieving some level of personal potential (Bochenek 2011:136). Self-actualisation is a process of development to and it is characterised by confidence and a positive attitude. Every individual has a need for self-actualisation to fulfil an inner feeling of one's own potential (Machado, Silvestre, Kara-Jose & Kara-Junior 2014:146).

Women's reproductive health plays an important role in family and society. Because women bear children, and also often bear the responsibility for nurturing them, when their sexual and reproductive health needs are not met it can have a devastating cascading impact on their families' welfare and that of future generations. Women's health problems thus affect the physical and mental state of both family and society. According to the WHO (2006:1), being 'healthy' relates to an individual having complete physical, mental and social well-being; 'healthy' does not imply the mere absence of disease.

Self-actualisation is the driving force behind a woman who seeks to terminate an unintended pregnancy. The legalisation of termination of pregnancy allows women to attain freedom and control over issues of reproductive health which in turn brings fulfilment in their lives and fill them with confidence. Carrying an unintended pregnancy can be an extremely frustrating and an emotional traumatic experience for women and they need information from knowledgeable healthcare professionals to help them decide for or against an abortion. Pajouhandeh (2013:22) agrees individuals seek information that can assist them to feel and be safe in meeting their individual needs. In this regard, women seek information on the legal and safe way of terminating a pregnancy to bring a difference to their lives.

Reproductive health services are part of CTOP service delivery. When a woman who is already pregnant has knowledge of other options such as adoption, foster parenting or

the biological father paying maintenance (Mhlanga 2003:118-9) she can make an informed and autonomous decision about carrying the child full term or opting for a CTOP. Post-abortion, women must also be aware of the different contraceptive methods to prevent further unwanted or unintended pregnancies that could result in either another abortion or incidences of unsafe abortion and its consequences (Macha, Muyuni, Nkonde & Faúndes 2014:S49).

It is worthwhile to ponder on how reproductive knowledge empowerment inspired Zambian women to take control of their reproductive health which consequently heightened their sense of self-actualisation. Macha et al (2014:S49) conducted a retrospective, observational study on increasing access to legal termination of pregnancy and post-abortion contraception at the University Teaching Hospital in Lusaka, Zambia. They write that up until 2007 termination of pregnancy was not often performed at the specific hospital while post-abortion contraception and family planning “was rarely given” (Macha et al 2014:S49). Then, in 2007, an initiative was launched by the University Teaching Hospital together with the Federation of International Gynecology and Obstetrics (FIGO) with the aim to prevent unsafe abortion and thus reduce maternal mortality in the east, central, and southern African regions. Macha et al (2014:S49-S50) expounds on this initiative as follows:

> Staff began to inform patients of the benefits of preventing a further pregnancy and to provide these women with contraceptive methods. At the same time, the hospital staff was given information on the actual legislation governing the practice of abortion in Zambia and encouraged to provide safe, legal terminations of pregnancy as an alternative to combatting the many complications resulting from the practice of unsafe abortion. Over the 3-year period between 2009 and 2011, each year over 5 000 women were admitted with an incomplete abortion or to request a safe termination of pregnancy. Overall, the percentage of all abortion patients who left the hospital using a contraceptive method increased from 25% in 2009 to almost 70% in 2011 (Macha et al 2014:S49-S50).

The authors state it was encouraging that among all women who underwent a legal termination of pregnancy the majority were adolescents “suggesting that this new generation of women is more aware of their rights” (Macha et al 2014:S50). In terms of self-actualisation, this example proposes that the younger generation of women are more self-actualised women who attain what they want and are comfortable and independent to make their decisions regarding their reproductive health. Insight builds confidence in an individual and assists her or him to view a problem in a positive way (Pajouhandeh 2013:25).

2.6 CONCLUSION

This chapter provided a literature review on structure, processes and outcome of CTOP services in public health facilities using the Donabedian model of quality care.

The findings from the literature review indicated some past challenges still exist in terms of the infrastructure in facilities where CTOP is implemented. These challenges hamper the delivery of quality CTOP services in public health facilities. Serious space constraints which lead to overcrowding, unacceptably long waiting times as well as poor ventilation and lighting and the unavailability of privacy remain serious concerns. The shortages of human and material resources are challenging as it leads to an imbalance in other CTOP areas where material resources are available but there are no human resources to carry out the required activities.

The processes of CTOP services experience overcrowding which is worsened by the poor infrastructure and shortage of human and material resources. The introduction of the booking system to deal with the issue of access still has to overcome various obstacles while the use of contraceptives by women after terminating a pregnancy remains problematic. The referral system in CTOP services need to be reviewed in order to meet the needs of women’s reproductive health.

The outcomes of CTOP services are perceived to be of good quality because no complications are reported in literature related to this area. However, priority should be

given to the impact that staff attitude and the stigmatisation of CTOP has on the quality of CTOP outcomes. Staff working in CTOP services needs continuous debriefing sessions to be able to cope with the many and varied challenges experienced in this unit.

It was determined from the literature reviewed that CTOP healthcare professionals feel neglected by their own colleagues and experience no or little support from management in public health facilities. Admittedly, CTOP remains a contentious service delivery in the health domain, but it is also undeniably true that women, healthy women, need proper and female-focused healthcare in order to be able to carry their sexual and reproductive functions safely and successfully. Therefore, it is not only required but also expected from management to intervene in the challenges that exist in the CTOP unit and to find strategies to drive this service forward.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In chapter 2, a review of available literature provided background information on the current quality of CTOP services in public health facilities. The purpose of the study was to develop guidelines to improve the quality of CTOP services in public health facilities using the Donabedian model of quality care. To achieve the objectives of the study, a quantitative non-experimental cross-sectional survey design was used.

This chapter describes the methodology that was used to conduct the study, the instruments and the manner in which the data was managed in order to accomplish the objectives of the study. According to Polit and Beck (2012:741) a research methodology refers to the techniques used to structure a study, gather the data and analyse the information in a systemic manner to assist in answering the research question posed in the study. The current study was conducted in two phases to achieve the set objectives.

In Phase 1, the objective was to determine the current state of the quality of CTOP services in public health facilities using the Donabedian model of quality care.

The objectives that guided the study towards achieving the purpose were as follows:

- to assess the quality of the structure of the CTOP services in public health facilities Tshwane district
- to determine the quality of the processes used in CTOP services in public health facilities
- to evaluate the quality of the outcomes of the CTOP services in public health facilities.

3.2 RESEARCH DESIGN

A quantitative design was adopted by the researcher to allow a systemic investigation of the phenomenon under study. According to Polit and Beck (2012:739), quantitative research is a holistic, rigorous and controlled investigation of phenomena through the collection of rich narrative materials that lead to precise measurement and quantification.

Quantitative research is systemic, meaning the researcher has to follow specific steps to arrive at the expected results. Quantitative research is based on objective measurements and produces numbers to quantify the findings. According to Mikander (2010:24) quantitative researchers gather numeric data, this is data that can be counted and it produces statistics to explain what has been found with regard to the assessment of the topic under study. Watson (2015:44) states quantitative research produces numbers, makes measurements, applies analyses and draws conclusions. The most important elements in quantitative research are the use of numeric information, generalisability and objectivity (Maree 2007:145).

The quantitative research method was relevant in this study because numeric information had to be collected pertaining to the quality of CTOP services in public health facilities, measured and analysed statistically to address the three set research questions (Polit & Beck 2012:14).

- What is the quality of the structure of the CTOP services rendered in public health facilities?
- What is the quality of the processes of the CTOP services rendered in public health facilities?
- What is the quality of the outcomes of the CTOP services rendered in public health facilities?

Fassinger and Morrow (2013:75) assert that quantitative research helps to provide large representative population samples and summarises numeric data in ways that are clear and persuasive to managers and policy makers.

3.2.1 Cross-sectional survey design

A survey was a form of quantitative research adopted in this study. According to Leedy and Ormrod (2010:187) survey research involves acquiring information from a population by asking them questions and tabulating their answers. The use of surveys permits the researcher to study more than one variable. Polit and Beck (2012:744) states survey research is non-experimental and uses direct questioning to obtain information about people's activities. Surveys enable the researcher to obtain data about practices, situations and people's views at one point in time. Non-experimental research designs do not involve the use of treatment.

The researcher adopted a quantitative, non-experimental cross-sectional survey design to assess the quality of CTOP services in public health facilities using the Donabedian model of quality care. According to Sedgwick (2014:2), the advantage of cross-sectional surveys is that they are easy, cheap and quick to perform since they are often based on questionnaires. The researcher's aim was to ask questions to source information about the current state of the quality of CTOP services in public health facilities. Cross-sectional surveys are useful in assessing practices in relation to a particular health problem and provide an indication of the magnitude of the problem in the population (Sedgwick 2014:1).

Cross-sectional survey research provides information which helps policy makers in establishing health priorities (WHO 1999:215). The researcher chose the cross-sectional survey design to gather information about the current state of the quality of CTOP services in public health facilities to provide information indicating evidence that challenges do indeed exist and they impct negatively on the quality of CTOP service delivery in public health facilities. Of further importance was that by identifying gaps in the current system, management and policy makers would be informed of how far SA has come since the implementation of CTOP services in 1997 up till the present day.

In a cross-sectional survey research studies data is collected at one point in time (Polit & Beck 2012:725). Using a cross-sectional survey research design is advantageous because it is flexible (Keough & Tanabe 2011:37) and prone to non-responsive bias if

participants consent to take part in the study but later withdraw from it resulting in non-representativeness of the sample (Sedgwick 2014:2). Cross-sectional survey research can be repeated to assess trends over time. However, the researcher should refrain from including different participants each time because it will make it difficult to assess change (Sedgwick 2014:2).

3.2.2 Research setting

A research setting refers to the natural environment where information was gathered (Polit & Beck 2012:49). In this study the natural setting was the public health facilities offering CTOP services in the Tshwane district in Gauteng. Natural settings are important in research as being in their usual workplace makes participants feel comfortable and at ease when surrounded by familiar environment while providing the requestes information (Atchley, Strayer & Atchley 2012:2).

The public health facility settings comprised of central, tertiary and district hospitals as well as community health centres. Because the public health facilities are situated far apart clients have to travel quite a distance to access the CTOP services. At the time of data collection, two out of the designated 10 health facilities were not rendering CTOP services any more.

3.3 Population

The population is defined as the entire set of individuals or objects having some common characteristics (Polit & Beck 2012:738). In this study, the population consisted of three target groups comprising of healthcare professionals, facility and quality managers, post-CTOP clients and public health facilities. The first target population group consisted of 16 female registered professional nurses and midwives rendering CTOP services in the eight public health facilities including health facility and quality managers who were in managing positions in these facilities at the time of the study.

The second target population group comprised of post-CTOP clients who utilised the CTOP services in the 8 public health facilities at the time of the study. The third population group included the 8 public health facilities rendering CTOP services in the Tshwane district. In total the aggregated number of cases who met the inclusion criteria (Burns & Groove 2005:342, Polit & beck 2008:338) and from which the researcher generalised the findings (Schneider et al 2007:177) was 104.

The purposefully selected population was representative of all CTOP healthcare professionals rendering the CTOP (including reproductive health) services in public health facilities. Therefore, the choice of the population under study appears to be relevant in terms of knowledge and ability to contribute meaningful information towards the study topic.

3.4 Sample and sampling

A sample is a part of the population which is deliberately selected to participate in a research study. Sampling is the process of selecting a subset or sample of the population to represent the entire population (Polit and Beck (2012:742). The characteristics of the sample closely approximate those of the population under study (Polit & Beck 2012:275). The current researcher selected 16 registered professional nurses and midwives involved in rendering CTOP services, a second sample comprising eight facility and quality managers, 72 post-CTOP clients and eight public health facilities involved in rendering CTOP services at the time of data collection.

The researcher chose to use the universal sampling method for the first population sample. Universal sampling in this study will allow the researcher to draw a sample from a uniform distribution of the population (Pencheva, Atanassov & Shannon 2009:2). The population was chosen because they were the only respondents who were knowledgeable about the topic under study and who would therefore be able to provide the relevant information needed.

The second sample consists of all clients who were using the CTOP services in public health facilities in the Tshwane district at the time of the study. A non-probability convenient sampling method was used to draw a sample of clients who were post-termination of pregnancy. Convenient sampling involves selecting the most readily available persons as participants in the study (Polit & Beck 2012:724).

In convenient sampling, participants happen to be at the right place at the right time (Etikan, Musa & Alkassim 2015:2). Post-CTOP clients were conveniently selected to participate in the study based on the fact that they will contribute meaningful information towards the topic under study because they have had experience of having a termination of pregnancy done at the facility.

The third subset was the public health facilities which were selected based on the fact that they had been designated by the Minister of Health to provide CTOP services. Although, as mentioned, Tshwane district has 10 public health facilities designated to provide CTOP services, two of these facilities no longer provided this service.

3.4.1 Sample size

The sample size is the number of people who participate in a study, and they are an important factor in the power of the analysis and in statistical conclusion validity (Polit & Beck 2012:742). The first sample size in this study consisted of 24 respondents of which 16 were registered professional nurses and midwives, eight were facility managers and five held the position of quality managers. The second sample size comprised of 72 post-CTOP clients and the third sample size of eight public health facilities. In total the sample size in this study was made up of 104 respondents.

Data was collected from eight facility managers thus from all eight the heath facilities the facility managers completed and returned questionnaires. Five of the quality managers did participate in the study and answered questionnaires. Seventy two post-CTOP clients did answer the questionnaire. Finally, participants in the eight public health facilities took part in the study.

3.5 Data collection instrument

The data collection instrument was a questionnaire developed and designed by combining and modifying ideas from different studies to generate numeric data to quantify and generalise the findings in this study. It consisted of four sections. The first section provided demographic data. This was followed by three separate sections on the quality of CTOP services in public health facilities. The first pertained to the structure, the second to the processes and the third section to the outcomes as per Donabedian's model of quality care. A questionnaire happened to be the most suitable method of collecting data because of the wide geographical dispersion of the study population. Making use of a questionnaire was suitable because it enabled the researcher to include respondents over a wide area.

The questionnaire included closed- and open-ended questions. Polit and Beck (2012:298) assert that closed-ended questionnaires provide uniformity of responses since the respondent chooses the answer that matches the question the closest according to his or her knowledge and experience. The closed-ended questions used were dichotomous and required a 'Yes' or 'No' response. However, open-ended questions do not limit the respondents' responses but provoke a wide range of responses (Walsh & Brinker 2016:88).

The questionnaire included clear set instructions on how participants should go about answering the questions. The questionnaire consisted of six sections namely: A, B, C, D, E and F outlined as follows:

Section A: gathered biographic data of the first participants, namely age, gender, marital status, current position at work, additional qualifications, institution presently working in, years of experience as registered nurse and in the unit, hours of work per day, and allocation and development in CTOP services. Biographic information plays an important role in research because it embraces the characteristics of the participants (Jung & Ejermo 2014:113).

Section B: questions focused on the quality of the structure of CTOP services in public health facilities.

Section C: gathered information on the quality of the processes of CTOP services in public health facilities.

Section D: questionnaires dealt with the quality of the outcomes of CTOP services in public health facilities.

Section E: focused on the biographic data of the second respondents namely age, marital status, current status, public health facility attended, number of children and number of pregnancies

Section F: questions dealt with the outcomes of CTOP services in public health facilities as experienced by the post-CTOP client.

3.6 Data collection

According to Polit and Beck (2012:725) data collection is the gathering of information to address the research problem. Data was collected between February 2015 and June 2015 in public health facilities designated to provide CTOP services in the Tshwane district. Geographically, these facilities are scattered over a wide area in the district. Self-administered closed- and open-ended questionnaires were distributed to the participants by the researcher herself. She visited the different public health facilities to explain the purpose of the study and process to respondents and to clarify any information with regard to the questionnaires that they might not have understood.

Data was collected at one point in time in an easy and economical way. The use of questionnaires has the advantage that can cover a large area for collection of data which was indeed the case in this study. The respondents received the same questionnaires which were formulated based on the objectives of the study. The researcher personally distributed the questionnaires, waited for the respondents to complete them and then collected them herself. For anonymity and confidential

reasons, she kept the completed, returned questionnaires in a container that only she had access to. Data was coded and captured onto a devised spreadsheet by making use of the Microsoft Excel 2007 program before being entered onto a computer software program for processing. To ensure anonymity, the participants were not required to disclose their personal information or identities on the questionnaire (de Jager 2015:2).

3.6.1 Pilot study

A pilot study was done to test the feasibility of the questionnaires and to ensure that the correct data collection procedure was followed including testing the questionnaire for any errors. A pilot study is a small-scale test that is undertaken to examine the feasibility of the instrument before embarking on a full-scale study (Hazzi & Maldaon 2015:53). A pilot study is essential in assisting the researcher to detect flaws in the instrument and make adjustments if necessary.

The questionnaire was pilot tested with all the staff in a specific CTOP clinic in a public health facility with characteristics similar to those of respondents who would be included in the main study to determine whether it was (i) usable as a data collection instrument that would generate relevant and sufficient data covering the study topic, and (ii) whether all respondents would understand the questions and how they were expected to answer it. Thabane et al. (2010:9) assert that conducting a pilot study is an essential requirement to enhance the success of the main study. The response from the pilot study was positive and therefore no modifications or changes were made to the original questionnaire. The respondents who participated in the pilot study as well as the data they provided were excluded from the actual study to avoid bias (Arain, Campbell, Cooper & Lancaster 2010:5).

3.7 VALIDITY AND RELIABILITY

To ensure validity and reliability in this study, a pilot study was conducted to test the instrument and the feasibility of the study.

3.7.1 Validity

Polit and Beck (2012:336) state validity is the degree to which a research instrument measures what it is supposed to measure. Burns and Grove (2009:380) and Polit and Beck (2010:336-342) identify the following aspects of measurement instrument validity and point out that, if applied, it will ensure validity of the clinical audit tool: face validity, content validity, construct validity and criterion-related validity are used in research studies investigating different situations. For the purpose of this study, construct validity was applicable.

According to Leedy and Ormrod (2010:92) construct validity is the extent to which an instrument measures a characteristic that cannot be directly observed but is assumed to exist. To ensure validity the questionnaires developed focused on the topic to obtain information about the quality of CTOP services in public health facilities. The questionnaire was checked and validated by the supervisor, co-supervisors and statistician for use. Using the Delphi technique method increased the validity of the guidelines developed in this study. The researcher also sought to seek the experts' consensus on the findings of the survey.

3.7.2 Reliability

Reliability is the consistency and accuracy of an instrument to measure the target attributes. A reliable instrument's measure reflects true scores on repeated occasions accurately (Polit & Beck 2012:331). The reliability of the instrument refers to the "ability of the instrument to perform and produce similar or the same results when administered again under similar circumstances" (Burns & Grove 2009:719).

Burns and Grove (2009:222) define reliability as “the degree of consistency of dependability with which an instrument measures an attribute”. In this study, reliability was achieved by distributing the same questionnaire to pilot participants for a pilot study. A pilot study was conducted to make certain that the questions were viable and would render information relevant to the research topic. The pilot study conducted showed a high level of internal reliability of the instrument. In this study Cronbach’s Alpha coefficient was used to calculate each item to reflect internal consistency and reliability between the items in the audit tool.

3.8 DATA ANALYSIS

Data analysis is the systemic organisation and synthesis of research data (Polit & Beck 2012:725). The data from the completed questionnaires was analysed with the help of the statistician. The researcher grouped the questionnairres into the mentioned six different sections to facilitate the processing of the data. The experienced statistician devised a spreadsheet by making use of the Microsoft Excel 2007 program, the experienced statistician helped to devise a spreadsheet onto which the data could be captured. The information was fed into a computer program called STATA version14 software. The data from the questionnaires was gathered in a quantifiable way.

The data was organised using frequencies and percentages to assess the quality of CTOP services in public health facilities and to propose strategies as solutions. The total number of questionnaires distributed was a 110 and the total number of completed and returned questionnaires was 104 giving a response rate of 95.6%. A total of 6 questionnaires were spoiled.

3.9 ETHICAL CONSIDERATIONS

The research protocol was authorised by the Faculty of Health Sciences Research Ethics Committee of the University of Pretoria through the Department of Nursing

Science (protocol number 446/2014). To proceed with the study, permission was requested in writing and granted from the Tshwane Ethics Committee and the managers of the participating public health facilities. Ethical considerations/issues for the study are addressed in detail in Annexure A.

The researcher adhered to the requirements of the ethical considerations by attaching an information leaflet and informed consent to each questionnaire to ensure privacy, anonymity and confidentiality. The information leaflet explained the nature of the study, procedure to be followed, risks involved and the rights of the participants. Obtaining informed consent from the participants is essential when conducting a study (Lentz, Kennett, Perlmutter & Forrest 2016:65). Any participant who wishes to do so must be allowed the freedom to withdraw from the study at any point in time if they so wish without any penalty (Leedy & Ormrod 2010:102).

3.10 CONCLUSION

This chapter dealt with the methodological steps taken to address the research problem. The research design, population, sampling processes, data collection instrument and procedure as well as the pilot study was all described. The ethical considerations have been followed to ensure they do not impact on the study.

The following chapter presents the analysis and discussions of the data obtained from the survey. A full interpretation and presentation of results regarding the quality of the structure, processes and outcomes of CTOP services in public health facilities in the Tshwane district are included in chapter 4.

CHAPTER 4

INTERPRETATION AND PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter focuses on Phase one and presents the analysis and interpretation of data obtained from the survey that was conducted. A questionnaire was used to collect data from the respondents in the Tshwane district public health facilities providing CTOP services. The questionnaires were distributed by hand and collected after completion. Data was analysed with the help of a statistician using STATA software version 14.

The population for this study was composed of eight facility and quality managers, 16 registered professional nurses and midwives, 72 post-CTOP clients and eight public health facilities totalling 104 respondents.

In the first phase of the study a questionnaire was used to collect data from participants regarding the quality of CTOP services in public health facilities in the Tshwane district using the Donabedian model of quality care.

PHASE 1

4.2 PILOT STUDY

The researcher undertook a pilot study with the aim of refining the data collection instrument. Hazzi and Maldon (2015:53) define a pilot study as an essential step which

forms the pedestal for the research because it is done to improve the quality and efficiency of the research instrument.

A small sample of eight participants was used with the same characteristics as that of the population under study. Ethical considerations were adhered to and informed consent was obtained. To test the validity of the instrument, the pilot study was conducted using eight participants consisting of a health facility manager, quality manager, registered professional nurses and clients. The pilot group and the results did not form part of the main study. An analysis assessing the scale of reliability of the instrument using Cronbach's alpha was conducted. Cronbach's alpha provides a measure of internal consistency of items in a sample (Tavakol & Dennick 2011:53). Cronbach's alpha is an important element in the evaluation of the assessment of a questionnaire because it adds validity and accuracy to the interpretation of the research results (Tavakol & Dennick 2011:54). If the value of the Cronbach's alpha is greater than 0.7 the instrument is considered reliable. The value of the Cronbach's alpha for the pilot study came as 0.98, thus, the instrument was considered reliable for the study because the values were acceptable and excellent. In Table 4.1 the entire result of the Cronbach's alpha is given.

Table 4.1 Test of reliability of the questionnaires *(n=8)*

NO OF ITEMS	ASSESSING RELIABILITY	CRONBACH'S ALPHA
42	Managers with demographics included	0.98
32	Structure with demographics excluded	0.98
8	Structure with demographics excluded	0.91
8	Outcomes without demographics	0.97
13	Client data with demographics	0.98
10	Clients without demographics	0.96

The questionnaire consisted of six sections as set out below:

Section A: the biographic data of the respondents.

Section B: questions focused on the quality of the structure of CTOP services in public health facilities.

Section C: gathered information on the quality of the processes of CTOP services in public health facilities.

Section D: questionnaires dealt with the quality of the outcomes of CTOP services in public health facilities.

Section E: focused on the biographic data of participant sample three, the post-CTOP clients.

Section F: questions dealt with the outcomes of CTOP services in public health facilities as experienced by the post-CTOP clients.

The order of the interpretation and presentation of the results are presented in the following way for ease of understanding.

i. Participant sample one: the facility and quality managers and their responses to the questions in Sections A to D in the questionnaire are addressed.

ii. Participant sample two: deals with the healthcare professionals' (registered professional nurses and midwives) responses to the questions posed in Sections A to D in the questionnaire.

iii. Participant sample three: the post-CTOP clients and their responses to the questions in Sections A to D of the questionnaire are presented under Section E and Section F.

PARTICIPANT SAMPLE ONE: FACILITY AND QUALITY MANAGERS

SECTION A

4.3 DEMOGRAPHIC INFORMATION OF FACILITY AND QUALITY MANAGERS *(n=8)*

The demographic information is an important starting point in data analysis since it provides the profile of the respondents. The analysis thereof yielded valuable information as regards the structure of the sample. The demographic data collected included age, gender, marital status, current position at work, job grade, additional qualifications, institution presently working in, years of experience as a registered nurse, years of experience in the CTOP unit, hours of work per day, allocation and development in CTOP services. Table 4.2 present the overall findings of this section however the figures discuss the specific finding in details.

Table 4.2 Demographic data of health facility and quality managers in percentages *(n=8)*

NUMBER	AGE IN YEARS	PERCENTAGE
1.	21 – 30 years	0.0
	31 – 40 years	15.0
	41 – 50 years	0.0
	51 years and above	85.0
2.	**Gender**	
	Male	15.4
	Female	84.6
3.	**Marital status**	
	Single	7.7
	Married	92.3

NUMBER	AGE IN YEARS	PERCENTAGE
	Live-in partner	0.0
	Widow	0.0
4.	**Current position at work**	
	Health facility manager	61.5
	Quality manager	38.5
	Registered professional nurse	0.0
	Registered midwife	0.0
5.	**Job grade/level**	
	P/NA 2	
	P/NA 3	
	P/NA 4	
	P/NA 5 (Operational manager)	
6.	**Additional qualifications**	
	Advanced midwifery	18.0
	Others (specify)	15.0
	None	76.9
7.	**Which institution do you presently work in?**	
	Community health centre	38.2
	District hospital	31.0
	Regional hospital	0.0
	Tertiary hospital	15.4
	Central hospital	15.4
8.	**How many years (experience) as a registered nurse/midwife?**	
	0 - 5 years	15.4
	6 - 10 years	15.4
	10 years and above	69.2

NUMBER	AGE IN YEARS	PERCENTAGE
9.	**How many years (experience) in this unit?**	
	0 - 5 years	15.4
	6 - 10 years	30.8
	10 years and above	53.9
10.	**How many hours do you work per day?**	
	8 hours.	100
	12 hours.	0.0
11.	**Allocation**	
	Rotation	0.0
	Fixed	100
	Both	0.0
12.	**Development in CTOP services**	
	Attend in-service	15.4
	Attend workshops	15.4
	Attend symposiums	0.0
	None of the above	69.2

4.3.1 Age

The managers' age range is shown in Figure 4.1. Eighty five per cent (85%) of the managers was 51 years and above while fifteen per cent (15%) of the managers was between 31 and 40 years old. This indicates that most managers managing public health facilities were well advanced in age - an important element since it is associated with work experience and maturity. The shortage of young managers in this sample indicates future implications for the management of public health facilities. The sample reflects that there were no young individuals with potential and interest to be developed into successors to manage public health facilities in the future. Public health facilities should focus on future management and review their strategic plan to be able to

respond to changes taking place in its environment. The ages of health facility and quality managers are reflected graphically in Figure 4.1.

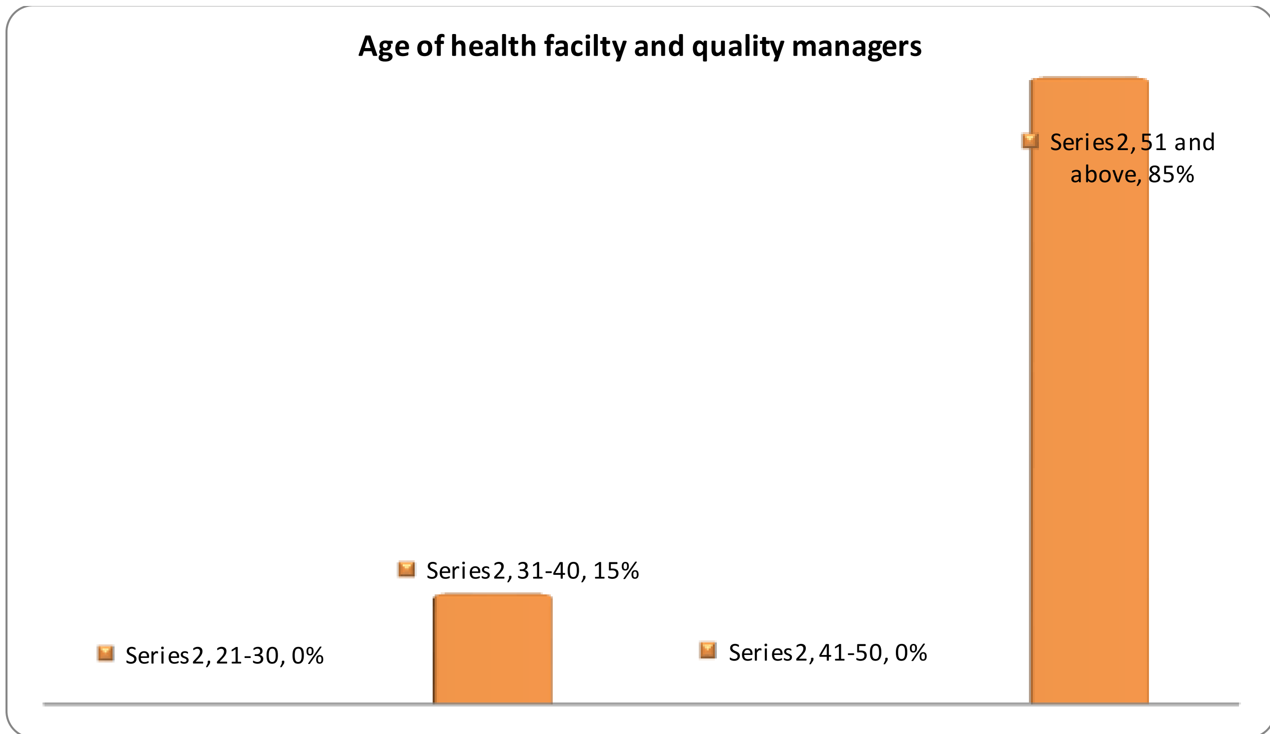

Figure 4.1 Age of health facility and quality managers *(n=8)*

4.3.2 Gender

The distribution of respondents by gender is shown in Figure 4.2. The number of female respondents was eighty five per cent (85%) with males at fifteen per cent (15%). The dominating gender in the management of public health facilities that participated in the study was female. The high number of female managers occupying management positions in public health facilities indicates an understanding and appreciation of diversity. Employers are expected to promote career development and practice non-discrimination by appointing females in management positions (Trzcinski & Holst 2010:1).

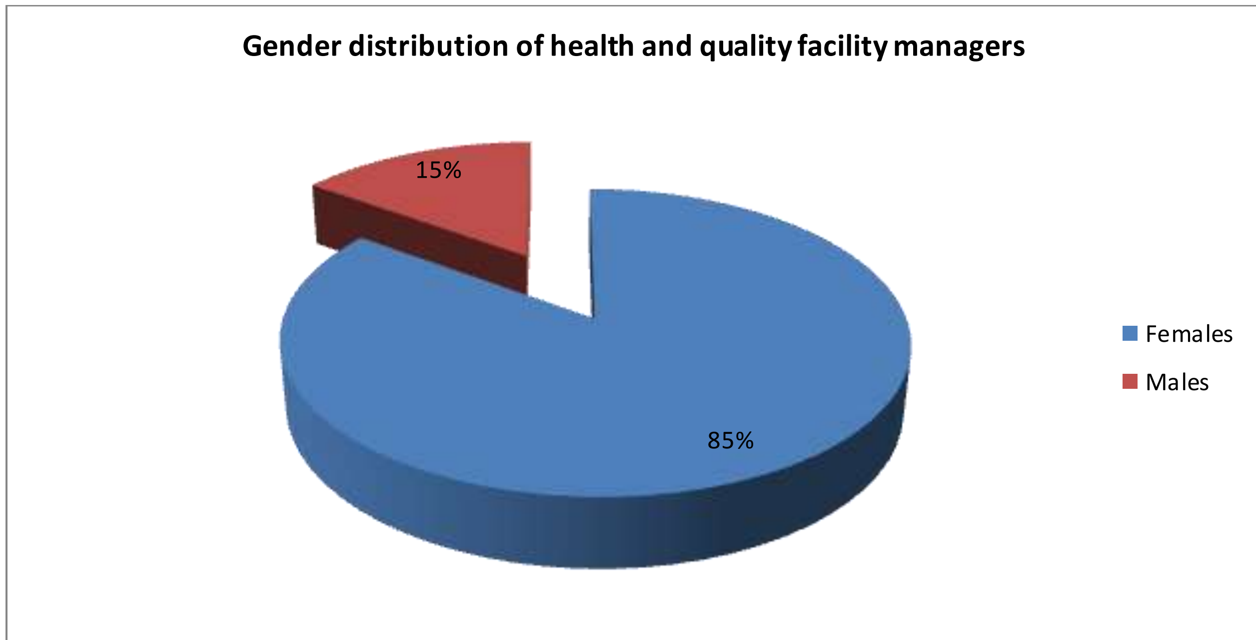

Figure 4.2 Gender distributions of health and quality facility managers *(n=8)*

4.3.3 Marital status

The respondents were asked about their marital status to which ninety two per cent (92.3%) responded they were married. Only seven per cent (7.7%) were single. Marital status plays an important role in management. This is supported by Odanga, Aloka and Raburu (2015:121) who state marital status has an influence on the managers' emotional stability which is associated with tolerance. Management positions require emotional maturity because there are many challenges that need a sober approach to resolve (Odanga et al 2015:117).

4.3.4 Current position at work

Table 4.2 shows the distribution of the current position at work that the respondents occupied. All respondents were managers of different departments in in various public health facilities. Sixty one per cent (61.5%) managed the public health facilities while

thirty eight per cent (38.5%) managed the quality department. The low percentage of quality managers (38.5%) who participated in the study raises concerns because it indicates the unavailability of quality managers in other public health facilities. It is imperative that public health facilities establish quality units to oversee the challenges of quality issues in health facilities.

4.3.5 Job grade/level

No responses were forthcoming as this item was not applicable to the managers

4.3.6 Additional qualifications

Some of the respondents indicated that they had at least one additional qualification. Seventy six per cent (76.9%) did not have advanced midwifery. Seven per cent (7.7%) did have advanced midwifery as an additional qualification. Fifteen per cent (15.4%) of the respondents had other qualifications. Some of the respondents were qualified nurses and had practiced nursing before they occupied facility management positions. It is a requirement to have management as an additional qualification in order to be able to display skill in responsibility and accountability in managing the provision of services as required (Giberson, Yoder & Lee 2011:27).

4.3.7 Which institution do you presently work in?

Since the Department of Health (DoH) has many levels of health services, it was imperative to know which institution the respondents worked in at the time of the study. Thirty eight per cent (38.5%) of the respondents worked in community health centres and thirty per cent (30.8%) in district hospitals. Fifteen per cent (15.4%) of respondents worked in tertiary and central hospitals respectively as indicated in figure 4.3. The level of management of these public health facilities differ according to the level of care

rendered and the size of the health facility as stipulated in the policy on management of hospitals (National Health Act 61 of 2003).

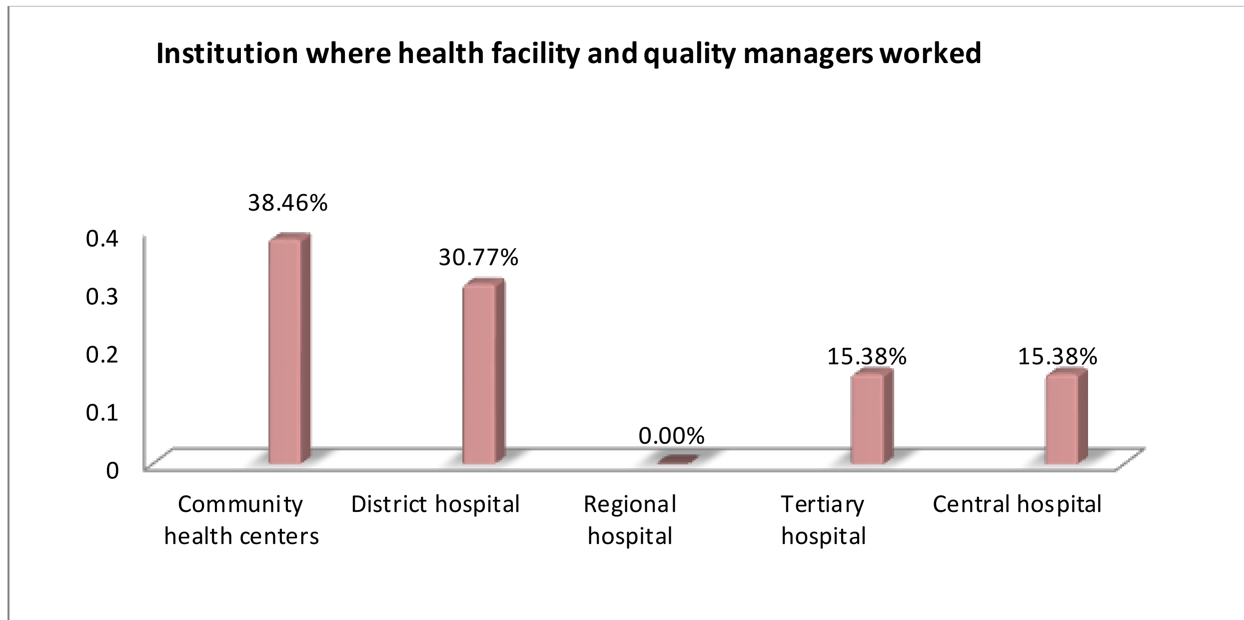

Figure 4.3 Institutions where health facility and quality managers worked *(n=8)*

4.3.8 How many years' experience as a registered nurse?

The results shown in Table 4.2 indicate sixty-nine per cent (69.2%) had ten years' and above experience as registered nurses. Of the respondents, fifteen per cent (15.4%) had between 6 -10 years' experience as registered nurses. Similarly, registered nurses with between 0 – 5 years experience also constituted fifteen per cent (15%). The majority of the managers (84.6%) in this sample were experienced registered professional nurses. This is a fruitful result as managers with a nursing background are found to do better and adapt quicker in managing public health facilities because of their experience in this field (Herbitter, Bennett, Schubert, Bennett & Gold 2013:752).

4.3.9 How many years' experience in this unit?

The respondents were requested to indicate their years of experience in the management unit to which fifty-three per cent (53.9%) indicated that they had spent ten years and above in the unit. Thirty per cent (30.8%) of the respondents had 6 -10 years' experience in the unit while fifteen per cent (15.4%) had between 0 - 5 years' of experience in the unit. The years of experience indicates the knowledge an individual has acquired in that unit. The results of this section indicate that most respondents (84.7%) were experienced in health facility management. The percentage of managers with less years of experience indicates poor succession planning and the younger generations' seemingly lack of interest in public health facility management.

4.3.10 How many hours do you work per day

A hundred per cent (100%) of the respondents indicated that they worked eight hours per day which allowed them time to facilitate the smooth management of the facility's activities as managers. Hours of work per day were well represented by the respondents in terms of the management category. Managers work a straight shift which is measured by output towards achieving set targets (Smith, Mossialos & Papanicolas 2008:15).

4.3.11 Allocation

Respondents were requested to indicate their type of allocation to which a hundred per cent (100%) indicated their allocation was fixed. Managers' allocation is fixed for assessment of the efficiency and effectiveness of the managers' leadership capabilities in terms of carrying out the mandate and reaching the set goals (Lear 2012:3).

4.3.12 Development on CTOP services

The respondents were requested to indicate whether they had been developed to manage CTOP service. The results set out in Table 4.2 show that sixty nine per cent (69.2%) had not been developed on the management of CTOP services. Fifteen per cent (15.4%) of the respondents indicated that they had attended an in-service on CTOP services while another fifteen per cent (15.4%) had attended CTOP workshops. It is important for managers of public health facilities to be knowledgeable about CTOP services because it enables and empowers them to manage CTOP challenges. Ansari et al (2015) asserts that facility managers' knowledge of CTOP management is vitaly important as far as supporting the delivery of quality CTOP services is concerned.

Tadesse, Kahsay, Tilahun and Berhe (2014*)* also found that good knowledge on CTOP management demonstrated by managers in public health facilities enhances the rendering of quality CTOP services. Public health facility managers need to participate fully to ensure that the CTOP unit functions appropriately.

Sundaram, Juarez, Ahiadeke, Bakole and Blades (2014) support the notion that public health facility managers should be trained to acquire more knowledge about CTOP services as it will assist them in supporting this programme to the fullest.

SECTION B

4.4 STATEMENTS REGARDING THE QUALITY OF THE STRUCTURE OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES BY FACILITY AND QUALITY MANAGERS *(n=8)*

The second section of the questionnaire contained items seeking to assess the quality of the structure of CTOP services in public health facilities. The respondents were

requested to agree with statements by marking “Yes” or “No”. The statements will be discussed in the same order as they appear on the questionnaire as will the responses.

Table 4.3 Assessment of quality of CTOP structure by facility and quality managers in percentages *(n=8)*

ITEM	TOPIC	YES	NO
1.	The facility structure allows delivery of quality CTOP services	92.3	7.7
2.	The space provided for rendering CTOP services is adequate	92.3	7.7
3.	The CTOP unit is air-conditioned and well ventilated	15.4	84.6
4.	There is a post CTOP rest room for clients	53.8	46.2
5.	There is a tea room for nurses	69.2	30.8
6.	There is a nurses’ station in the unit	30.8	69.2
7.	The CTOP structure allows for privacy	61.5	38.5
8.	The CTOP environment is inviting	69.2	30.8
9.	There is enough equipment for delivery of CTOP service	53.9	46.2
10.	There is new equipment in CTOP unit	30.8	69.2
11.	Equipment maintenance is provided timeously	23.1	76.9
12.	The CTOP environment is clean	76.9	23.1
13.	There are enough registered professional nurses and midwives allocated to the CTOP units	23.8	76.9
14.	Registered professional nurses and midwives are trained in CTOP services	69.2	30.8
15.	Registered professional nurses and midwives in CTOP clinics rotate to other units	15.4	84.6
16.	The principle of skill mix is practised in CTOP unit	38.5	61.5

ITEM	TOPIC	YES	NO
17.	There is a programme in place to develop CTOP registered professional nurses and midwives	38.5	61.5
18.	Registered professional nurses and midwives in CTOP units are allocated to night duty	7.7	92.3
19.	There are incentives for registered professional nurses and midwives working in CTOP units	23.1	76.9
20.	CTOP registered professional nurses and midwives are allocated to other units	46.2	53.9
21.	Doctors are allocated to CTOP units to assist in case of an emergency	53.9	46.2
22.	CTOP services operate uninterrupted daily	61.5	38.5
23.	Many clients are seen daily in CTOP units	76.9	23.1
24.	Repeat patients are seen frequently in CTOP units	61.5	38.5
25.	CTOP clinics are easily accessible	69.2	30.8
26.	CTOP units operate for 12 hours daily	0.0	100

4.4.1 Facility structure allows delivery of quality CTOP services

The results of this statement show that ninety-two (92.3%) respondents indicated that the facility structure allowed for the delivery of quality CTOP services while seven per cent (7.7%) respondents were negative as indicated in Table 4.3. The high (92.3%) response of facility and quality managers to this statement is unfortunately not convincing because infrastructural challenges that were experienced on implementation of CTOP services in 1997 still exist as confirmed by many studies found in literature (Lebese 2009:35; Srivastava et al 2013:211-13; Cooper et al 2004:70). The researcher believes that if the participating managers took rounds in the CTOP clinic the results would be different because they would highlight the structural challenges reported by many scholars.

4.4.2 Space provided for rendering CTOP services is adequate

The majority of the respondents, ninety-two per cent (92.3%) indicated that the space provided for rendering CTOP services was adequate; on the other hand, seven per cent (7.7%) believed the space inadequate as seen in Table 4.3. The responses of the facility and quality managers did not give a true reflection regarding the issues of space in CTOP units in public health facilities. From the time of the implementation of the CTOP Act (1 of 2008) till the present the public health facilities' infrastructure has been described as having inadequate space for the provision of CTOP services (Nguyễni et al 2007:176, Chimtembo et al 2013:245, Pickles 2013:518).

4.4.3 CTOP unit is air-conditioned and well ventilated

The majority of the respondents, namely eighty-four per cent (84.6%) indicated that the CTOP unit had no air-conditioning and not well ventilated thus leaving fifteen per cent (15.4%) respondents who agreed that the CTOP unit was air-conditioned and well ventilated. The majority of respondents (84.6%) who agreed there was a lack of ventilation in the CTOP units were a cause for concern. Proper ventilation is important and is required in CTOP units to prevent the spreading of infections. Furthermore, CTOP clients deserve to be treated in a safe, clean and comfortable environment (Zhai & Osborne 2013:468).

4.4.4 There is a post CTOP rest room for clients

The results of this statement show a little more than half of the respondents, namely fifty-three per cent (53.8%) positively stated there was a rest room for CTOP clients with forty-six per cent (46.2%) respondents who disagreed as they indicated there were no rest rooms for CTOP clients. CTOP rest rooms provide an area for clients to be observed for bleeding and severe pain prior to discharge. The CTOP structure in public health facilities does not have a post-CTOP rest room making comprehensive care

difficult to achieve in terms of improving women's reproductive health. CTOP services should provide high quality care which includes convenient rest rooms for client recovery after terminating a pregnancy (Pickles 2013:520).

4.4.5 There is a tea room for nurses

The results to this statement show sixty-nine per cent (69.2%) of the respondents stated there was a tea room for nurses while thirty per cent (30.8%) indicated that there was no tea room for nurses. The facility structure should provide areas where employees can have tea and lunch breaks away from their work area. Tea break areas give employees' time to gather more energy to focus on set goals, socialise and catch up on the latest developments with others. The CTOP unit should be developed with staff's well-being in mind, it should attract new staff and make them as well as the current staff feel valued. Considering the staff's needs in an organisation makes them feel worthy which leads to staff retention, staff motivation and staff satisfaction. Offering them a quiet area away from the hectic work area for tea and lunch breaks will help them to keep a balance between work and enjoyment (Drury, Francis & Chapman 2008:41-2).

4.4.6 There is a nurses' station in the unit

Sixty-nine per cent (69.2%) of the respondents indicated that there was no nurses' station in the unit. Thirty per cent (30.8%) respondents indicated that there was a nurses' station. The current structure of the CTOP units does not provide for a nurses' station which should be located at the entrance allowing visibility and access. The CTOP environment should be designed in such a way that job satisfaction is supported and promoted. A nurse's station provides control over the flow of activities in the unit (Chiang 2010:3).

4.4.7 The CTOP structure allows for privacy

According to the results of this statement, sixty-one per cent (61.5%) observed that the CTOP structure allowed for privacy, while thirty-eight per cent (38.5%) of the respondents indicated that the CTOP structure made no allowances for privacy. The structure of public health facility CTOP clinics was not designed to provide privacy. In the CTOP unit this structural deficiency breaches the legal confidentiality and privacy rules enforced by the CTOP Acts (92 of 1996 and 1 of 2008). The provision of privacy is a priority factor in reproductive health services. Women need to feel safe and comfortable when discussing personal or intimate issues with the healthcare professional. For women, discussing termination of pregnancy and other reproductive health issues are delicate matters and they need privacy when sharing or discussing thoughts and feelings about it with healthcare professionals. Women also tend to open up more when they are in a secluded, comfortable environment which is an important aspect in CTOP services (Jacobs & Hornsby 2014:858).

4.4.8 The CTOP environment is inviting

The majority of the respondents, sixty-nine per cent (69%) indicated that the CTOP environment was inviting, while thirty-one per cent (31%) indicated that the CTOP environment was not inviting at all as indicated in Table 4.3. The CTOP environment in public health facilities was dull and lonely for both clients and healthcare professionals. In some facilities the CTOP unit was situated in an isolated area away from other units. Because having a CTOP is an emotional draining experience, an inviting environment would reduce clients' stress and enhances positivity about their life. In addition, the environment should allow privacy, relaxation and free communication to realise the purpose of improving woman's reproductive health (Tilles, Denny, Cansino & Creinin 2016:166).

4.4.9 There is enough equipment for delivery of CTOP services

To this statement fifty-three per cent (53.9%) of the respondents answered positively that there was enough equipment for the delivery of CTOP services. Forty-six per cent (46.1%) responded negatively. Availability of equipment plays an important role in delivering quality CTOP services to reduce maternal morbidity and mortality. The lack of adequate equipment in public health facilities is a barrier towards rendering quality CTOP services (Paul et al 2014:6).

4.4.10 There are new equipment in CTOP unit

Thirty per cent (30.8%) of the respondents indicated that there was new equipment in CTOP units and sixty-nine per cent (69.2%) disagreed. The results of Fisher's exact in Table 4.4 shows 0.055 marginal significance since community centres and central hospitals were the only health facilities without new equipment. The results of this statement indicate there was an unequal distribution of equipment in facilities rendering CTOP services. Designated public health facilities rendering CTOP services should be prioritised in receiving new equipment for effective and efficient functioning of CTOP services (Tesfaye & Oljira 2013:5).

Table 4.4 There are new equipment in CTOP units (Fisher's exact = 0.055)

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
No	92.3	42.9	50.0	80.0
Yes	7.7	57.1	50.0	20.0

4.4.11 Equipment maintenance is provided timeously

Twenty-three per cent (23.1%) of the respondents indicated that equipment maintenance is provided timeously with seventy-six per cent (76.9%) indicating that

equipment maintenance was not provided timeously. On evaluating the association between structure, processes and outcomes in health facility institution, Fisher's exact results (0.023) show significance association indicating that maintenance to the equipment in community centres and district hospitals was not done timeously as shown in Table 4.5. The maintenance of equipment seems to be prioritised in tertiary and central health facilities, however, equipment maintenance should receive equal attention at all levels of health facilities because functionality of equipment affects all levels of care in health facilities.

Table 4.5 Equipment maintenance is provided timeously

(Fisher's exact = 0.023)

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
No	84.6	71.4	25.0	20.0
Yes	15.4	28.6	75.0	80.0

4.4.12 The CTOP environment is clean

Seventy-six per cent (76.9%) respondents indicated that the CTOP environment was clean as opposed to the twenty-three per cent (23.1%) who indicated it was not clean. CTOP services are provided in public health facilities where cleanliness is a priority. The legalisation of CTOP services endorses that termination of pregnancy must be provided in a clean health facility environment to prevent infections. Twenty-three per cent (23.1%) of the responses to this statement was "no". Health facility environments are loaded with microorganisms thus cleaning and disinfection was recommended to minimise infection outbreak in health facilities including all CTOP environments.

4.4.13 There are enough registered professional nurses and midwives allocated to the CTOP units

According to twenty-three per cent (23.1%) of the respondents, there were enough registered professional nurses and midwives allocated to CTOP units. By far the majority, namely seventy-six per cent (76.9%) indicated that there were not enough professional nurses and midwives allocated to CTOP units. The shortage of skilled registered professional nurses and midwives to deliver quality CTOP services was a major challenge facing many public health facilities. A shortage of staff is not a dilemma that developed over time – it has been an obstacle since the time CTOP services were implemented two decades ago and has been mainly associated with stigmatisation of both clients who sought CTOP services as well as the staff who provided it in health facilities. Secondly, societal as well as the personal moral values of nurses who are either allocated to or choose to work in CTOP units play a pivotal role in the ongoing battle between pro-life (against abortion) versus pro-choice (for abortion) thought. Staffing is the most crucial element for the provision of CTOP services; therefore, staffing issues require urgent, immediate and conscious attention. Many healthcare professionals cite ethical and moral reasons for not wanting to be involved in CTOP – under the Constitution it is also their human right to willingly participate in CTOP services or decline participation (Mokgethi et al 2006:33-4).

4.4.14 Registered professional nurses and midwives are trained in CTOP services

The response of sixty-nine per cent (69.2%) to this statement indicated that registered professional nurses and midwives were trained in CTOP services with thirty per cent (30.8%) not trained as indicated in Table 4.3. Additional training is a non-negotiable requirement for registered professional nurses and midwives to be allocated to CTOP units. Additional training ensures that capable, qualified and skilful healthcare professionals provide high quality CTOP services. Trained healthcare professionals procure essential specific knowledge and skills for quality termination of pregnancy procedures as well as quality reproductive health service delivery (Harries et al 2009:2).

4.4.15 Registered professional nurses and midwives in CTOP clinics rotate to other units

A low response of fifteen per cent (15.4%) to this statement indicated that registered professional nurses and midwives rotated to other units while a high response of eighty-four per cent (84.6%) indicated they did not rotate to other units. The Fisher's exact results 0.035 in Table 4.6 show significant association of staff rotation with the institutions involved and cannot be generalised. The issue of staff rotation is perceived as affecting tertiary and central health facilities and such does not apply to community and district health facilities. To curb shortage many health facilities engage in staff rotation to ensure services are rendered.

Table 4.6 Association between public health facilities and staff rotation (Fisher's exact = 0.035)

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
No	84.6	71.4	25.0	20.0
Yes	15.4	28.6	75.0	80.0

4.4.16 Principle of skill mix is practiced in CTOP units

Thirty-eight per cent (38.5%) of the respondents indicated that skill mix was practiced in CTOP units, however, sixty-one per cent (61.5%) of the respondents disagreed. Most CTOP clinics in public health facilities are managed by registered professional nurses and midwives only (Harries et al 2014:2). The skill mix discussed in this statement pertained to the category of human resources.

4.4.17 There is a programme in place to develop CTOP registered professional nurses and midwives

According to thirty-eight per cent (38.5%) of the respondents, there was indeed a programme in place to develop CTOP registered professional nurses and midwives. However, the majority sixty-one per cent (61.5%) of the respondents indicated that there was no programme in place to develop CTOP registered professional nurses and midwives. The unavailability of a programme to develop registered professional nurses and midwives is a barrier towards improving the quality of CTOP services. Development plays a very crucial role in skilling healthcare professionals to contribute effectively in rendering quality CTOP services. The development of registered professional nurses and midwives further ensure that healthcare professionals are competent and confident in carrying out the termination of pregnancy procedures (Sheldon & Fletcher 2017:263, Holloway, Crow & Myers 2008:6).

4.4.18 Registered professional nurses and midwives in CTOP units are allocated to night duty

Only seven per cent (7.7%) of the respondents indicated that registered professional nurses and midwives in CTOP units were allocated to night duty and overall majority of ninety-two per cent (92.3%) indicating that registered professional nurses and midwives in CTOP units were not allocated to night duty. CTOP services are regarded as out-patients services where clients are attended to and discharged at the end of the day. Most CTOP clinics operate during the day in public health facilities. Allocating CTOP nurses on night duty impacts negatively on the MDG 5 goal and should be critically looked into and discouraged. Night duty allocation reduces the number of knowledgeable CTOP nurses, creating a challenge in access to CTOP services (Sajjadnia, Siavashi, Kavosi, Moznebi & Ravangard 2015:90). The researcher points out that nursing is a 24-hour service and night duty should be included in the shift for nurses.

4.4.19 There are incentives for registered professional nurses and midwives working in CTOP units

The response of twenty-three per cent (23.1%) to this statement indicates that there were incentives for registered professional nurses and midwives working in CTOP units. However, seventy-six per cent (76.9%) responses indicated that there were no incentives for registered professional nurses and midwives working in CTOP units. The majority of the respondents, seventy-six per cent (76.9%) thus confirmed that there were no incentives for nurses working in CTOP units. The introduction of incentives in CTOP services would be welcomed as a retention strategy to attract, retain and motivate registered professional nurses to serve women and improve the quality of reproductive health services (Dressler, Maughn, Soon & Norman 2013:4).

4.4.20 CTOP registered professional nurses and midwives are allocated to other units

Forty-six per cent (46.2%) of the respondents indicated that CTOP registered professional nurses and midwives were allocated to other units while fifty-three per cent (53.9%) of the respondents disagreed. The results of this statement indicated a critical shortage of registered professional nurses and midwives in public health facilities. Consequently, this may result in CTOP nurses being allocated to other units to assist there.

4.4.21 Doctors are allocated to CTOP units to assist in case of an emergency

A fifty-three per cent (53.9%) response to the statement indicated that doctors are allocated to CTOP units to assist in case of an emergency however, forty-six per cent (46.2%) responded negatively. Fisher's exact results 0.071 in Table 4.7 show marginal significance per institution with regard to the allocation of doctors in CTOP units to assist with emergencies. The results of this statement show community and district

health facilities as the only facilities that did not have doctors allocated to CTOP units to assist with emergencies. The respondents indicated that the idea of allocating a doctor in CTOP units - especially at community and district health facilities levels – will be welcomed as they can deal with challenges of second trimester pregnancy termination which is above the scope of registered professional nurses and midwives.

Table 4.7 Doctors are allocated to CTOP units to assist in case of an emergency (Fisher's exact = 0.071)

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
No	76.9	71.4	25.0	20.0
Yes	23.1	28.6	75.0	80.0

4.4.22 CTOP services operate uninterrupted daily

Sixty-one penrcent (61.5%) of the respondents indicated that CTOP services operate uninterrupted daily whereas thirty-eight per cent (38.5%) responded negatively. The Fisher's exact results 0.059 to this statement show marginal significance as seen in Table 4.8. Community and district public health facilities were the only areas that reported CTOP services that were interrupted daily while tertiary and central public health facilities enjoyed the benefit of managing uninterrupted CTOP services. Interruption of CTOP services becomes a barrier for women to access the CTOP service. CTOP service interruptions happen when staff members are allocated to other units due to a low turnover of clients.

Table 4.8 CTOP services operate uninterrupted daily (Fisher's exact 0.059)

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
No	30.8	66.7	0.0	0.0

INSTITUTION	COMMUNITY	DISTRICT	TERTIARY	CENTRAL
Yes	69.2	33.3	100	100

4.4.23 Many clients are seen daily in CTOP units

A seventy-six per cent (76.9%) response to the statement indicates that many clients are seen daily in CTOP units. Twenty-three per cent (23.1%) indicated that not many clients were seen daily in CTOP units. The results of this statement indicate possible poor adherence to the use of contraceptives by women. A number of studies report overcrowding in CTOP areas due to the high demand of the services. The reduction in the number of clinics designated to provide CTOP services results in too many clients seeking CTOP at the few clinics that are still functional. Obviously this influx of clients causes immense overcrowding in the clinics still providing CTOP services (Harries 2010:126).

4.4.24 Repeat clients are seen frequently in CTOP units

A sixty-one per cent (61.5%) response to this statement indicated that repeat clients were seen frequently in CTOP units.Thirty-eight per cent (38.5%) of the respondents indicated they did not experience the same phenomenon. The results of this statement show repeat requests for CTOP by the same women are still encountered in CTOP clinics despite the availability and accessibility to reproductive health services which includes teaching women how to prevent unintended or unwanted pregnancies. It is essential for women to understand that they need to act responsibly to prevent unwanted pregnancies. They must become more aware and informed on the many methods freely available to prevent an unintended pregnancy (Ndwambi & Govender 2015:25). A concerted effort must be made to provide continuous family planning education to inform all clients seeking CTOP services that unwanted or unintended pregnancy can be avoided and prevented.

4.4.25 CTOP clinics are accessible

Sixty-nine per cent (69.2%) of the respondents indicated that CTOP clinics were accessible with thirty per cent (30.8%) indicating that CTOP clinics were not accessible. CTOP accessibility encompasses a number of factors such as staffing, available and accessible material resources and staff attitude. These factors need to be addressed to ensure clients access the clinic for assistance. Successful access to a CTOP clinic includes focusing on aspects such as making women feel welcome in a positive and comfortable environment where they feel safe and protected and where their choice to have a CTOP is understood and respected. Improtantly informing them of the availability of services offered to assist with unwanted pregnancies should be done in a positive, professional and understanding manner by professional nurses and midwives whose attitude in no way whatsoever reflects judgement or negative behaviour (Mushwana, Monareng, Ritcher & Muller 2015:15).

4.4.26 CTOP units operate for 12 hours daily

All (100%) of the respondents indicated that CTOP units do not operate for 12hrs per day. The researcher concurs with the 100% response rate to this statement because CTOP units in public health facilities operate for eight hours daily from Monday to Friday. On weekends and public holidays they are closed. During the times they are open the CTOP uints provide services to many women.

4.4.27 Areas that need improvement with regard to structure of CTOP units in public health facilities by facility and quality managers

The respondents identified a number of areas in the CTOP structure that need improvement. Seven per cent (7.7%) indicated that the CTOP space was totally inadequate. Seven per cent (7.7%) was concerned about the fact that there was no

designated waiting area for clients. Air-conditioning in the CTOP area was raised as a concern by twenty-six per cent (26.5%) of the respondents.

Compromised privacy due to structural challenges was a problematic issue for nine per cent (9.1%) of the respondents and twenty-one per cent (21.6%) felt the ablution block in the CTOP area need to be improved. Thirty-four per cent (34.7%) identified the furniture as inadequate and attention had to be paid to it. The need for rest rooms was indicated by twenty per cent (20.2%) of the respondents.

4.4.28 Challenges you face in your work daily by facility and quality managers

Respondents indicated the challenges they faced on daily basis as follows: the shortage of nurses was indicated as a major challenge by seventy-two per cent (72.4%); second trimester termination was troubling to thirty-six per cent (36.7%); overcrowding was perceived as problematic by thirty-eight per cent (38.2%); and the referral route posed a challenge to nine per cent (9.1%). Thirty-six per cent (36.7%) indicated poor CTOP staff support and counselling as challenging.

SECTION C

4.5 STATEMENTS REGARDING THE QUALITY OF THE PROCESSES IN CTOP SERVICES IN PUBLIC HEALTH FACILITIES BY FACILITY AND QUALITY MANAGERS *(n=8)*

The third section of the questionnaire contained items assessing the quality of the processes of CTOP services in public health facilities. Respondents were requested to agree or disagree with the statements by marking answers as “Yes” or “No”. The questionnaires will be addressed in the order as they appear in Table 4.9.

Table 4.9 Assessment of the quality of CTOP processes by facility and quality managers in percentages *(n=8)*

NUMBER	ITEM	YES	NO
1.	Information with regard to service times are well displayed	53.9	46.2
2.	Clients are received warmly by staff	92.3	7.7
3.	Waiting time to receive service is monitored to improve quality	69.2	30.8
4.	Clients are counselled before CTOP	100	0.0
5.	There is compliance to the set CTOP standards	92.3	7.7
6.	Health education with regard to CTOP is given to clients	100	0.0
7.	Registered professional nurses and midwives display a positive attitude towards clients	92.3	7.7
8.	The procedure for procuring CTOP is explained to clients	92.3	7.7
9.	CTOP processes are assessed to ensure continuous quality care	92.3	7.7
10.	Clients are offered post-CTOP counselling	100	0.0
11.	All clients' information is recorded to improve quality	92.3	7.7
12.	Nursing audits are done to improve quality of CTOP services	84.6	15.4
13.	Policies are followed when rendering CTOP services	92.3	7.7
14.	Client satisfaction surveys are conducted to improve quality of CTOP services	61.5	38.5
15.	CTOP information records are up to date	84.6	15.4

NUMBER	ITEM	YES	NO
16.	CTOP standards, policies and protocols are user-friendly	92.3	7.7
17.	There are files with the latest CTOP information in the unit	69.2	30.8
18.	There are serious adverse events with the CTOP services	7.7	92.3
19.	Monthly meeting are held with all stakeholders	30.8	69.2
20.	There is an improvement in the knowledge about CTOP among clients	61.5	38.5
21.	There is a booking system in place	100	0.0
22.	Bookings are controlled to manage the clients	100	0.0

4.5.1 Information with regard to service times is well displayed

Fifty-three per cent (53.9%) of the respondents indicated that information with regard to service times was well displayed while forty-six per cent (46.2%) responded negatively. The results of this statement reveal that information regarding service times is not well displayed in public health facilities. Information sharing is crucial in the management of CTOP services and forms part of access to quality CTOP clinics (Liambila, Obare, Ikiugu, Akora, Njunguru, Njuma, Reiss & Birungu 2015:9).

4.5.2 Clients are received warmly by staff

The ninety-two per cent (92.3%) positive response to this statement indicated that clients were received warmly by staff. Only seven per cent (7.7%) responding clients asserted that they were not warmly received. The results of this statement reflect that staff members make an effort to make clients feel welcome; creating a friendly and welcoming atmosphere in a CTOP clinic relaxes clients and makes them feel welcomed. Clients that receive a warm welcome are likely to visit the facility again as well as share

their positive experience with their friends. They are also likely to complete the course of treatment to improve their health status (Kitila & Yadassa 2016:68).

4.5.3 Waiting time to receive a service is monitored to improve quality

To this statement sixty-nine pe cent (69.2%) agreed that waiting time to receive a service was monitored to improve quality while thirty per cent (30.8%) indicated that this time of waiting was not monitored to improve quality. Waiting time is a quality which needs close monitoring. Becker and Olavarrieta (2013:591) agree that delivering quality CTOP services is the central concern of reproductive health services and the focus should be to reduce long waiting times. The CTOP procedure was delicate and required meticulous preparation to guarantee safety of clients and ensure quality care was rendered taking into consideration the waiting times.

4.5.4 Clients are counselled before CTOP

All respondents (100%) indicated that clients were counselled before CTOP services. There were no negative responses to this statement. This indicates that the results of this statement confirm that CTOP providers comply with the set standards of procuring CTOP services which require that clients receive counselling. The Centre for Disease Control and Prevention (2014) recommend that counselling should be offered to all clients as part of termination of pregnancy services.

4.5.5 There is compliance to the set CTOP standards

Ninety-two per cent (92.3%) of the respondents indicated that there was compliance to the set CTOP standards while (7.7%) indicated that there was no compliance to the set CTOP standards. The results reveal most of the respondents (who were facility and quality managers in this case) believed they complied with the set CTOP standards

when rendering CTOP services in the CTOP units in allocated health facilities. Compliance with set guidelines, rules and Acts is considered vital for successfully providing CTOP service delivery which encompasses the provision of knowledge on reproductive health to prevent termination of an unwanted pregnancy. Compliance consequently leads to successful termination of pregnancy resulting in good outcomes and a decrease in maternal mortality rates.

4.5.6 Health education with regard to CTOP is given to clients

Health education with regard to CTOP is indeed given to clients as the 100% positive responses indicated. Health education is the corner stone of individusals' overall health as it ensures that well-informed clients are able to avert complications by seeking medical assistance for their health problems on time in a safe and specialised environment.

4.5.7 Registered professional nurses and midwives display a positive attitude towards clients

According to the ninety-two per cent (92.3%) respondents, they displayed a positive attitude towards clients. A minimum percentage of seven per cent (7.7%) responded negatively thereby implying there are still registered professional nursaes and midwives who are judgemental towards CTOP clients. Such a negative attitude of healthcare professionals, especially in CTOP services requires a robust approach to improve accessibility and acceptance of CTOP services. The findings further indicated an improvement in the percentage of registered professional nurses and midwives with a positive attitude towards clients.

4.5.8 The procedure for procuring CTOP is explained to clients

The majority of respondents, namely ninety-two percent (92.3%) indicated that the procedure for procuring CTOP was explained to clients with only seve per cent (7.7%) responding negatively. The results indicate that accurate and complete information on procuring CTOP must be explained to clients in a way that they understand. Subsequently, they will cooperate during the procedure to prevent complications. The CTOP procedure must be explained and should include the potential risks to allow the woman to be prepared for pain and discomfort that may follow (Hodes 2016:88).

4.5.9 CTOP processes are assessed to ensure continuous quality care

Responses of ninety-two per cent (92.3%) to this statement indicated that CTOP processes were assessed to ensure continuous quality care. Seven per cent (7.7%) responded that CTOP processes were not assessed to ensure continuous quality care. Concerning the assessment of processes, the results confirm that continuous assessment of CTOP processes should be done to identify gaps and develop strategies to better the quality of termination of pregnancy services rendered in health facilities where CTOP is provided.

4.5.10 Clients are offered post-CTOP counselling

A hundred per cent (100%) response to this statement showed that clients were offered post-CTOP counselling as indicated in Table 4.9. The results confirmed that the mandatory post termination of pregnancy counselling, which forms the basis of quality care in rendering CTOP services was adhered to by all respondents. Post-CTOP counselling encourages women to act responsibly in preventing unwanted pregnancies by choosing contraceptive methods that suit their lifestyle (Purcell et al 2016:171).

4.5.11 All clients' information is recorded to improve quality

Ninety-two per cent (92.3%) responded positively to this statement regarding recording of all clients' information to improve the CTOP services quality while seven per cent (7.7%) responded negatively. The results of this statement are consistent with record keeping guidelines. Proper recording of all clients' information is of utmost importance because it forms the basis of planning for treatment which will improve the quality of CTOP services (Percival 2014:69).

4.5.12 Nursing audits are done to improve quality of CTOP services

To this statement, eighty-four per cent (84.6%) respondents indicated that nursing audits were done to improve quality of CTOP services; however, fifteen per cent (15.4%) responded this was not done. The majority (84.6%) of the responses were consistent with quality improvement by declaring that nursing audits were done to improve quality of CTOP services. Auditing remains the best nursing tool used to identify gaps in the process of care rendered as well as for the development of quality improvement plans to ratify the gaps (Poortaghi et al 2015:2).

4.5.13 Policies are followed when rendering CTOP services

Again, the majority, ninety-two per cent (92.3%) responses to this statement indicated that policies were followed when rendering CTOP services. The minority, seven per cent (7.7%) of the respondents felt policies were not followed by disagreeing with this statement. Following policies when rendering CTOP services assist in averting serious adverse events. There was a high response rate of 92.3% that indicated that policies were followed to achieve positive reproductive outcomes for women. The 7.7% negative response might indicate unawareness that policies regulate the provision of CTOP services. Healthcare professionals rendering CTOP services should be encouraged to familiarize themselves with the policies governing the CTOP programme.

4.5.14 Client satisfaction surveys are conducted to improve quality of CTOP services

The positive responses of sixty-one per cent (61.5%) indicated that client satisfaction surveys were conducted to improve quality of CTOP services while thirty-eight per cent (38.5%) responded negatively. The 38.5% responses of facility and quality managers to this statement showed that there were too few client satisfaction surveys to adequately address the improvement of the quality of CTOP services. Conducting CTOP client satisfaction surveys in public health facilities will shed light on the challenges faced by women requesting termination of pregnancy services as well as provide guidance on what the expectations by clients are. Client satisfaction survey results should be used as the baseline for modifying the CTOP processes to meet the needs of women requesting termination of pregnancy services (Paul, Iyengar, Essén, Gemzell-Danielsson, Iyengar, Bring, Soni & Klingberg-Allvin 2015:9).

4.5.15 CTOP information records are up to date

Eighty-four per cent (84.6%) responses to this statement showed that CTOP information records were up to date leaving fifteen per cent (15.4%) responses indicating that CTOP information records were not up to date. The results of this statement show that although records were up to date with information, a significant need to keep client records updated still exist. Consistently keeping clients' CTOP records up to date with their information indicates the efficiency of the CTOP services and has a bearing on the future of CTOP services in terms of what can be done to better the service (Banerjee et al 2015:3).

4.5.16 CTOP standards, policies and protocols are user-friendly

According to ninety-two per cent (92.3%) responses to this statement, CTOP standards, policies and protocols were user-friendly; however, seven per cent (7.7%) indicated that

the CTOP standards, policies and protocols were not user-friendly. CTOP policies, protocols and regulations are self-explanatory and easy to follow. The results confirmed that healthcare professionals need to acquaint themselves with the documents for easy application as this will ensure full access to CTOP services to the full extent stipulated by the law (Hodes 2016:87-8, Strefling et al 2015:790).

4.5.17 There are files with the latest CTOP information in the unit

A response of sixty-nine per cent (69.2%) agreed with the statement that files with the latest CTOP information were available in the unit. Thirty per cent (30.8%) responded negatively as shown in Table 4.9. CTOP units should ensure that files with the latest information on CTOP are accessible and available to all healthcare professionals.

4.5.18 There are serious adverse events with CTOP services

Only seven per cent (7.7%) of the respondents indicated there were serious adverse events with CTOP services. By far the majority, namely ninety-two per cent (92.3%) of the respondents indicated that there were no serious adverse events with CTOP services. The 92.3% positive responses to this statement show there has been a significant improvement in CTOP services. The legalisation of CTOP services has put good quality practices in place which have since reduced serious adverse events (Hodes 2016:86).

4.5.19 Monthly meetings are held with all stakeholders

According to the thirty per cent (30.8%) responses to this statement, monthly meetings were held with all stakeholders. Unfortunately, sixty-nine per cent (69.2%) of the respondents indicated that monthly meetings were not held with all stakeholders as shown in Table 4.9. The 69.2% response rate to this statement implies that

management are not supportive of CTOP services in public health facilities. It is evident from the responses that no meetings are held with management to discuss challenges and issues concerning the CTOP uints, hence, inputs from management towards resolving these issues are non-existent.

4.5.20 There is an improvement in the knowledge about CTOP among clients

Sixty-one per cent (61.5%) responses to this statement indicated that there was indeed an improvement in knowledge about CTOP among clients. Thirty-eight per cent (38.5%) responded negatively and this was a course for concern because it showed a lack of improvement with regard to knowledge about CTOP among clients. The provision of continuous health education about CTOP services will improve the knowledge among clients ensuring a reduction in request for termination of pregnancy. Improved reproductive health knowledge among women will encourage them to prevent unwanted or unintended pregnancies (Mekuriaw, Mesay, Dejere, Kumalo, Feyissa & Henock 2015:4).

4.5.21 There is a booking system in place

A hundred per cent (100%) response to this statement confirmed that there was a booking system in place. The 100% response rate is positive and affirms that having a well-established booking system in place and using it correctly assists the CTOP unit to function smoothly and to full capacity.

4.5.22 Bookings are controlled to manage the clients

All (100%) respondents agreed that bookings were controlled to manage clients. This response showed that bookings were controlled to manage the flow of clients for best outcomes. The advantages of bookings are that all staff members can fully prepare to

provide quality CTOP services to the number of clients booked. Bookings increase client and staff satisfaction because of the controlled workload.

4.5.23 Key areas to improve the processes of CTOP services by facility and quality managers

Fifty-eight per cent (58.3%) of the respondents indicated that requests for second trimester pregnancy services needed to improve. Sixteen per cent (16.7%) felt there was a need for the allocation of a doctor to do second trimester termination of pregnancy. Thirty-three per cent (33.3%) felt there was an urgent need to train more CTOP nurses, forty-one per cent (41.7%) desired for improvement of the client referral system, and fourteen per cent (14.3%) wanted all designated CTOP areas to be functional.

4.5.24 Challenges in your work with CTOP processes by facility and quality managers

The following challenges were listed by respondents with regard to processes of CTOP services: an increase in second trimester termination requested by clients (41.7%); the lack of a proper ablution block (100%); the existing poor referral route (66.7%); more than one CTOP repeat (16.7%); and clients not honouring appointments (41.7%).

SEDTION D

4.6 STATEMENTS REGARDING THE QUALITY OF THE CTOP OUTCOMES IN PUBLIC HEALTH FACILITIES BY FACILITY AND QUALITY MANAGERS

The fourth section of the questionnaires contained statements seeking to evaluate the quality of CTOP outcomes in public health facilities. Respondents were requested to indicate whether they agreed or disagreed with the statements by marking it as "Yes" or "No". The results will be discussed following the responses.

Table 4.10 Assessment of the quality of the CTOP outcomes in percentages by facility and quality managers *(n=8)*

NUMBER	ITEM	YES	NO
1.	CTOP service are satisfactory	76.9	23.
2.	Nurses empathise with clients	92.3	7.7
3.	Clients are counselled before the procedure	100	0.0
4.	The procedure is explained to the client	100	0.0
5.	Clients ask questions related to CTOP services	92.3	7.7
6.	Clients are aware of their rights with regard to CTOP services	92.3	7.7
7.	Clients recommend others to use our clinic	92.3	7.7
8.	Clients are completely satisfied with the nurses' the service delivery	92.3	7.7
9.	Treatment is given post-CTOP procedure	100	0.0
10.	There is a change in the clients' health status after CTOP	76.9	23.1
11.	Effective CTOP outcomes are noted	84.6	15.4
12.	The public health facility is rated effective on CTOP management	84.6	15.4
13.	Registered professional nurses and midwives have a positive attitude towards clients	92.3	7.7
14.	Contraceptive are given post-CTOP	100	0.0

NUMBER	ITEM	YES	NO
15	There is no infection post-CTOP to our clients	92.3	7.7
16.	There is no report of complications post-CTOP	92.3	7.7
17.	Client and registered professional nurses and midwives relationships are good	92.3	7.7
18.	There is mutual trust between clients and registered professional nurses and midwives	100	0.0
19.	There are few or no CTOP repeats	46.2	53.9
20.	Bleeding is minimal post-CTOP procedure	100	0.0

4.6.1 CTOP services are satisfactory

This statement sought to determine whether CTOP services were satisfactory. Seventy-six per cent (76.9%) respondents agreed that CTOP services were satisfactory and twenty-three per cent (23.1%) responded negatively. The 76.9% response rate to this statement indicated that CTOP services were satisfactory because clients received the expected outcomes.

4.6.2 Nurses empathise with clients

A ninety-two per cent (92.3%) response to this statement showed that nurses empathised with clients with only seven per cent (7.7%) who disagreed. If nurses understand the conditions or situation which results in a client becoming unintentionally pregnant and she wants to terminate her pregnancy, the nurses may support and guide the client with empathy and understanding without being judgemental.

4.6.3 Clients are counselled before the procedure

All (100%) responses showed that clients were counselled before the procedure as indicated in Table 4.10. This positive response emphasises the importance of

counselling before a CTOP procedure to assist women to consider their options without being coerced. During counselling and before procuring a termination of the pregnancy, women are provided with accurate information which gives them a balanced perspective on which to base their decisions.

4.6.4 The procedure is explained to the client

Again, a hundred per cent (100%) responses agreed with this statement indicating that the procedure was explained thoroughly to the client. The response confirms the importance of thoroughly explaining the procedure to the client to gain her cooperation. Explaining the procedure to the client shows nurses respect them as human beings who have the right to know the procedure, what to expect and that they are not judged but supported.

4.6.5 Clients ask questions related to CTOP services

According to the ninety-two per cent (92.3%) responses, clients do ask questions related to CTOP services. Seven per cent (7.7%) responded negatively. Clients are encouraged to ask questions in order to provide clarity where there is inadequate knowledge. Asking questions broadens the clients' knowledge and understanding of CTOP services (Olavarrieta, Ganatra, Sorhaindo, Karver, Villalobos, García, Peréz, Bousieguez & Sanhueza 2015:251).

4.6.6 Clients are aware of their rights with regard to CTOP services

Respondents were requested to indicate if clients were aware of their rights with regard to CTOP services to which ninety-two per cent (92.3%) responded positively and seven per cent (7.7%) responded negatively. Most women were aware of their rights when it came to matters of reproductive health as indicated by 92.3% positive response rate.

Healthcare professionals were urged to continue giving information to the remaining 7.7% of women who were not aware of their rights in CTOP services to improve the quality of care rendered. Ensuring that clients are aware of their rights regarding CTOP services will improve the reproductive health of women.

4.6.7 Clients recommend others to use our clinic

A ninety-two per cent (92.3%) response rate to this statement indicated that clients recommended others to use the clinic while seven per cent (7.7%) responded they did not recommend the clinic they visited to other women. Women who terminated their pregnancies in a public health facility shared the experience they received with their peers recommending that they use the same clinic as indicated by the 92.3% responses. Reasons for the 7.7% who did not recommend the clinics could include ignorance about mentioning it to others, the possible judgemental attitude of nurses towards CTOP clients or even the lack of information clients may have about the availability and accessibility of CTOP services in a specific health facility (Rehnström Loi et al 2015:2).

4.6.8 Clients are completely satisfied with the nurses' service delivery

A ninety-two per cent (92.3%) response rate to this statement showed that clients were completely satisfied with the nurses' service delivery. Only seven per cent (7.7%) was seemingly not satisfied. The majority (92.3%) signified that nurses accepted CTOP services and they also supported improvement of women's reproductive health. Healthcare professionals should continue bettering their services to improve complete satisfaction of 7.7% who responded negatively to this statement.

4.6.9 Treatment is given post-CTOP procedure

To this statement, a hundred per cent (100%) response rate indicated that treatment was given post-CTOP procedure. The unanimous 100% response rate evidenced that treatment was given post-CTOP to prevent infection and manage pain as laid down in the CTOP Act (1 of 2008).

4.6.10 There is a change in the clients' health status after CTOP

A seventy-six per cent (76.9%) response to this statement indicated that there was a change in the clients' health status after CTOP, however, the twenty -three per cent (23.1%) who responded negativel is a concern. The 76.9% positive responses indicated that procuring safe and legal CTOP services changed the health status of clients in many ways whereas the 23.1% respondents who indicated they experienced no change in their health status after terminating a pregnancy gave reason for concern. Healthcare professionals are obliged to provide clear and understandable instructions after termination of pregnancy to improve the health status of clients (Veazey et al 2015:5, Bouchard 2014:14).

4.6.11 Effective CTOP outcomes are noted

To this statement eighty-four per cent (84.6%) indicated that effective CTOP outcomes are noted but fifteen per cent (15.4%) responded negatively. There was complete expulsion of the products of conception with termination of pregnancy ensuring effective outcomes of CTOP services as indicated by 84.6% of the respondents.

4.6.12 The public health facility is rated effective on CTOP management

According to the eighty-four per cent (84.6%) of the respondents, the public health facility was rated effective in managing CTOP services. Fifteen per cent (15.4%)

responded negatively. The majority of respondents (84.6%) agreed that CTOP services were managed effectively in public health facilities despite the structural challenges the latter had to deal with.

4.6.13 Registered professional nurses and midwives have a positive attitude towards clients

According to ninety-two per cent (92.3%) of the respondents, registered professional nurses and midwives had a positive attitude towards clients while seven per cent (7.7%) did not agree. The 92.3% positive results indicated an improvement in the attitude of registered professional nurses and midwives towards termination of pregnancy clients. The 7.7% negative response to this statement indicated the existence of a negative attitude by registered professional nurses and midwives towards clients.

4.6.14 Contraceptives are given post-CTOP

All respondents' (100%) positive responses to this statement confirmed that contraceptives were given post-CTOP as indicated in Table 4.10. The 100% response verified the important role that healthcare professionals play in preventing unwanted pregnancies by issuing contraceptives to post termination of pregnancy clients.

4.6.15 There is no infection post-CTOP to our clients

Ninety-two per cent (92.3%) respondents indicated that there was no infection post-CTOP to our clients' while seven per cent (7.7%) responded negatively as shown in the results. The high positive rate (92.3%) signifies improvement in CTOP services as it confirmed that there were no infections after termination of pregnancy procedure.

4.6.16 There is no report of complications post-CTOP

Ninety-two per cent (92.3%) respondents indicated there was no report of complications post-CTOP; however, seven per cent (7.7%) responded negatively. The majority of the respondents (92.3%) indicated that CTOP services were performed by qualified healthcare professionals under legal rules with no complications. The 7.7% who disagreed could indicate that some women developed complications post-CTOP – complications due to various other influences including (but not exclusive to) having difficulty in accessing safe and legal termination of pregnancy services.

4.6.17 Clients, registered professional nurses and midwives relationships are good

A response of ninety-two per cent (92.3%) to this statement indicated that among clients, registered professional nurses and midwives relationships were good.Only seven per cent (7.7%) responded negatively. The high percentage (92.3%) positive responses were proof that relationships among clients, registered professional nurses and midwives were good. The 7.7% negative responses indicated that clients still experience some negative elements hampering good patient-healthcare professional relationships in CTOP services.

4.6.18 There is mutual trust between clients and registered professional nurses and midwives

A hundred per cent (100%) response to this statement indicated that there was mutual trust between clients and registered professional nurses and midwives. The 100% response to this statement showed that clients had developed knowledge and understanding that led to the development of mutual trust with nurses ensuring the delivery of quality CTOP services.

4.6.19 There are few or no CTOP repeats

The minority, namely forty-six per cent (46.2%) of the respondents indicated that there were few or no CTOP repeats, however, fifty-three per cent (53.9%) respondents disagreed. With more than half of the responses (53.9%) indicating there were CTOP repeats is a troubling result. It implies that women are not knowledgeable about contraceptive use, does not adhere to contraceptive regimens or views CTOP as a contraceptive method. This is an issue that needs to be urgently addressed and rectified.

4.6.20 Bleeding is minimal post CTOP procedure

All respondents (100%) indicated that there was minimal bleeding post the CTOP procedure. Minimal bleeding is acceptable as was indicated by all respondents; however, continuous and heavy bleeding should be reported. Women should be warned of any bleeding complications in order to seek medical assistance timeously.

4.6.21 Areas of improvement with regard to outcomes of CTOP services by facility and quality managers

Eighty-nine per cent (89.7%) of the respondents indicated referral route as an area that needed to be corrected. Twenty-six per cent (26.7%) would like CTOP repeats to be addressed. Fifty-three per cent (53.3%) respondents wanted the space where CTOP is provided to be enlarged while twenty per cent (20%) wished for improvement in client health education. A further twenty per cent (20%) of the respondents indicated their desire to have more human resources (professional CTOP providers).

4.6.22 Challenges with CTOP outcomes in your work daily by facility and quality managers

Thirty-three per cent (33.3%) of the respondents indicated that CTOP repeats were a major challenge. The referral route was raised by thirty-three per cent (33.3%) of the respondents as a challenge experienced daily. Follow-up processes were also raised as a challenge by thirty-three per cent (33.3%) of the respondents. All respondents (100%) agreed that CTOP should not be used as family planning.

PARTICIPANT SAMPLE TWO: HEALTHCARE PROFESSIONALS (REGISTERED NURSES AND MIDWIVES)

SECTION A

4.7 DEMOGRAPHIC INFORMATION OF HEALTHCARE PROFESSIONALS

It was important to report on the demographic information of healthcare professionals because it embraces the characteristics of the participants; in this case, the healthcare professionals. Participant sample two, the healthcare professionals, and their biographic data as well as responses to the questions posed in the questionnaire follows the same pattern as applied in Section A. The Tables present the overall findings of this section however the figures discuss the specific finding in details giving a broader view in understanding the topic under study. In Table 4.11 the demographic information of the healthcare professional respondents are provided in percentages.

Table 4.11 Demographic information of healthcare professionals in percentages *(n=16)*

NUMBER	AGE IN YEARS	PERCENTAGE
1.	21 – 30 years	0.0
	31 – 40 years	12.5
	41 – 50 years	50.0
	51 years and above	37.5
2.	**Gender**	
	Male	0.0
	Female	100
3.	**Marital status**	
	Single	43.8
	Married	37.5
	Live-in partner	12.5
	Widow	6.3
4.	**Current position at work**	
	Health facility manager	0.0
	Quality manager	0.0
	Registered professional nurse	62.5
	Registered midwife	37.5
5.	**Job grade/level**	
	PNA 2	25.0
	PNA 3	6.3
	PNA 4	50.0
	PNA 5 (Operational manager)	18.8
6.	**Additional qualifications**	
	Advanced midwifery	18.8
	Others (specify)	37.5
	None	43.8

NUMBER	AGE IN YEARS	PERCENTAGE
7.	**Which institution do you presently work in?**	
	Community health centre	50.0
	District hospital	18.8
	Regional hospital	0.0
	Tertiary hospital	12.5
	Central hospital	18.8
8.	**How many years (experience) as a registered nurse/midwife?**	
	0 - 5 years	6.3
	6 - 10 years	0.0
	10 years and above	93.8
9.	**How many years (experience) in this unit?**	0.0
	0 - 5 years	18.8
	6 - 10 years	31.3
	10 years and above	50.0
10.	**How many hours do you work per day?**	
	8 hours	87.5
	12 hours	12.5
11.	**Allocation**	
	Rotation	43.8
	Fixed	43.8
	Both	12.5
12.	**Development in CTOP services**	
	Attend in-service	37.5
	Attend workshops	25.0
	Attend symposiums	0.0
	None of the above	37.5

4.7.1 Age

The ages of the healthcare professionals were grouped into intervals of ten years from twenty (20) to fifty (50) years. Fifty-one years and above was included to incorporate those that were above these years. According to the results in Figure 4.16, twelve per cent (12.5%) was between 31 and 40 years old; fifty per cent (50%) was between 41 and 50 years old while thirty-seven per cent (37.5%) was fifty-one years and above. The results of this statement showed the majority (87.8%) of healthcare professionals rendering CTOP services were at advanced ages (between 41 and 50 years and older). The results further indicated that younger healthcare professionals apparently had little interest in rendering CTOP services. It can therefore be posited that young healthcare professionals lack interest or motivation to contribute towards the reduction of maternal morbidity and mortality through CTOP services. The researcher believes that young healthcare professionals can positively influence clients in CTOP clinics to take full responsibility of their rights.

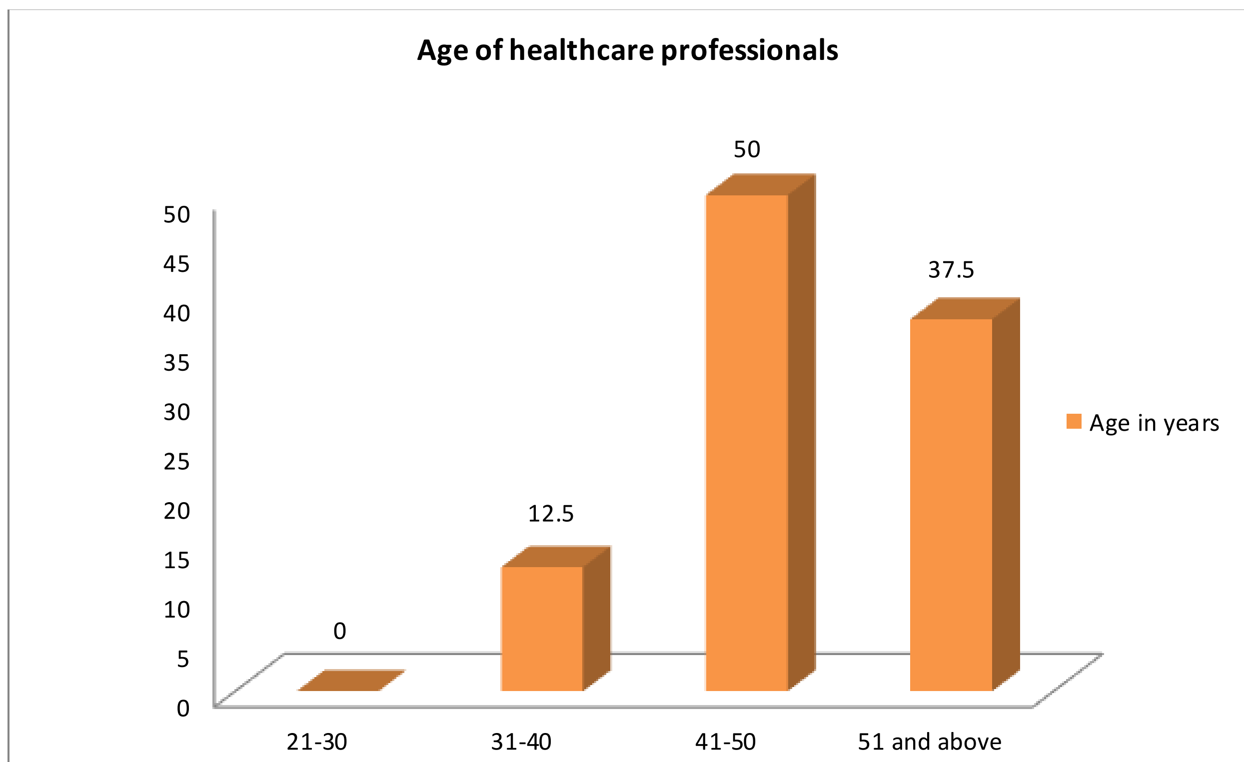

Figure 4.4 Age of healthcare professionals *(n=16)*

4.7.2 Gender

All (100%) sample respondents were female registered professional nurses and midwives who worked in the CTOP clinics; thus, no data from male respondents was obtained which is unfortunate. However, what is clear from the 100% female gender result is that the age-old perception of nursing as “the quintessential female profession” (Loughrey 2008) possibly still prevails in CTOP services. Considering the ongoing gender disparity in nursing, Zamanzadeh, Valizadeh and Azadi (2013:49) investigated the challenges and factors that cause male nurses – who initially chose nursing as their profession – to eventually leave it. These authors found that although percentages showed the appointment of male registered nurses continued to rise, there was no increase in appointing them in CTOP services.

Male registered professional nurses should be encouraged to join CTOP units and provide reproductive health counselling to men in particular since they impregnate women. Issues male professional nurses can address include, for example, enlightening men on the law and women’s rights, preventing the spread of HIV to females by emphasising the advantages of male condom use and encouraging voluntary testing and counselling (VCT) services for both partners (Botma, Motiki & Viljoen 2007:54-5). The July 2012 Interim Report on the Systematic Monitoring of voluntary medical male circumcision (VMMC) and scale-up in Eastern and Southern Africa (SYMMACS) reveal in SA (where 14 sites were operational as of January 2011 – eight in Gauteng, three in Mpumalanga, two in KwaZulu-Natal and one in the Free State) female nurses providing VMMC services outnumbered male nurses. In contrast, male providers of VMMC outnumbered “females by at least two to one” in Kenya and Zimbabwe (Bertrand, Rech, Dickens, Frade, Loolpapit & Machako et al 2013:21:50). Male circumcision “provides a level of protection from HIV infection for men” (Bertrand et al. 2012:13).

4.7.3 Marital status

The results of this section indicated that forty-three per cent (43.8%) of the respondents were single, thirty-seven per cent (37.5%) married, twelve per cent (12.5%) had live-in partners and six per cent (6.3%) were widowed. The results showed healthcare professionals from different levels of marital status rendered CTOP services. This simply means that registered nurses and midwives' are not influenced by their marital status to work in CTOP services or vice versa. To female healthcare providers who are involved in different aspects of abortion and reproductive health provision, marital status is negligible. Women's sexuality, reproductive issues and their status as competent decision-making individuals (Lebese 2009:15, 19) affect all women of reproductive age – CTOP clients as well as the healthcare professionals.

4.7.4 Current position at work

To this statement the results indicated that sixty-two per cent (62.5%) occupy the position of registered professional nurse while thirty-seven per cent (37.5%) were registered midwives as indicated in Table 4.11. The results of this statement concur with the CTOP Act (1 of 2008) which requires registered professional nurses and midwives to procure termination of pregnancy services. According to the results of this statement, all levels of professional nurses participate in rendering CTOP services.

4.7.5 Job grade/level

The results of this statement show that twenty-five per cent (25%) of the respondents were PNA2, six per cent (6.3%) were PNA3, fifty per cent (50%) were PNA4 and eighteen per cent (18.8%) were PNA5, an operational managers' position. PNA4 and PNA5 are more experienced registered professional nurses and midwives. The results show an imbalance in the allocation of PNA2 and PNA3 to render CTOP services. Nursing management should consider allocating equal numbers for the lower grade

nurses to gain experience in CTOP services. A balanced allocation can be used as a succession planning strategy in CTOP services.

4.7.6 Additional qualifications

It is the responsibility of every healthcare professional to keep abreast with current developments and knowledge in their field of practice. The results as shown in Table 4.11 indicated that eighteen per cent (18.8%) of the respondents had advanced midwifery as an additional qualification. Forty-three per cent (43.8%) had no additional qualifications and thirty-seven per cent (37.5%) had other qualifications such as management and education. Additional qualifications which are in line with reproductive health services will add value to CTOP service delivery. Therefore, more healthcare professionals should attend reproductive health courses or be trained in reproductive health issues to assist in reducing maternal morbidity and mortality. Competent, skilled and knowledgeable healthcare professionals in CTOP will improve the quality of CTOP services.

4.7.7 At which institution do you presently work?

According to the results, half (50%) of the respondents worked in community health centres, eighteen per cent (18.8%) in district hospitals, twelve per cent (12.5%) in tertiary hospitals and eighteen per cent (18.8%) was employed in central hospitals. The DoH in SA is divided into levels of care which relate to the complexity of care rendered and the skills required of the healthcare professionals. The levels of healthcare are meant to improve the efficacy and effectiveness of healthcare delivery. The management of reproductive health services such as CTOP requires proper distribution of human resources to successfully achieve the desired goals. White (2015:9) states the allocation of adequate resources in health facilities will ensure success in dealing with the priorities of health including reproductive health services.

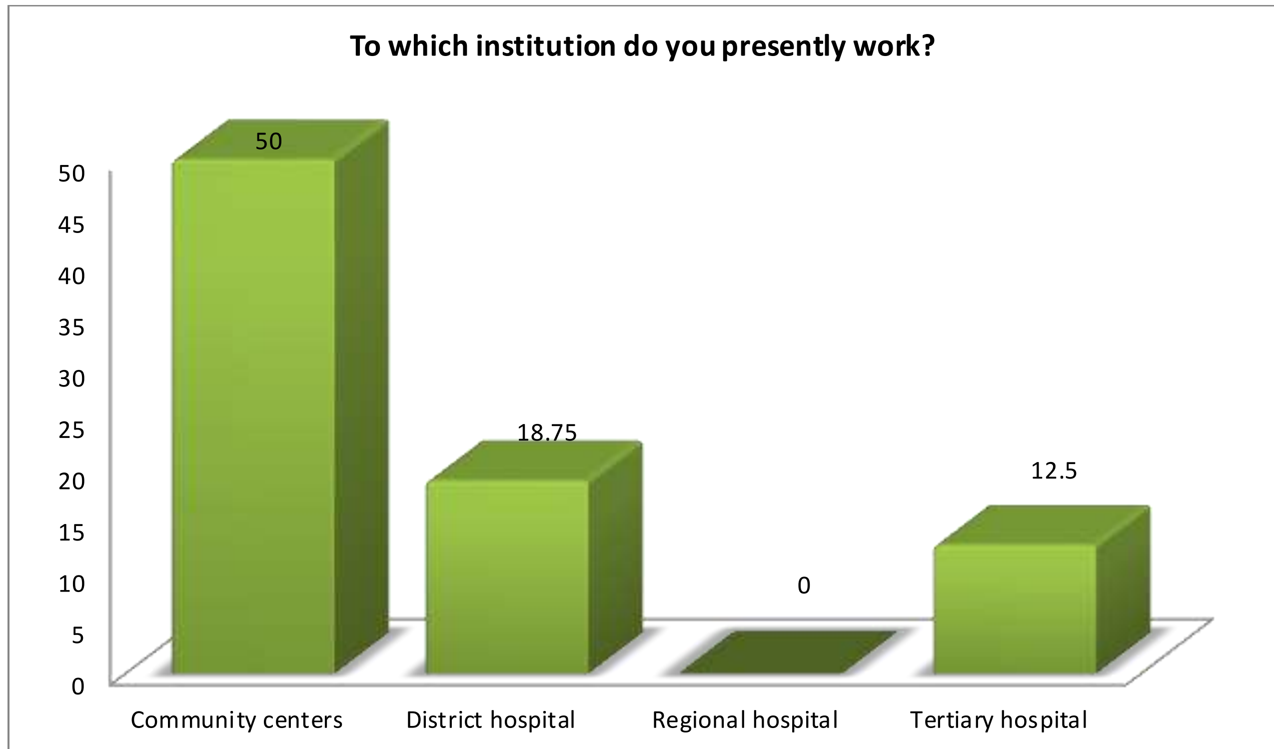

Figure 4.5 To which institution do you presently work *(n=16)*

4.7.8 How many years of experience as a registered nurse/midwife

The results of this statement indicated that ninety-three per cent (93.8%) of the respondents had ten years and above experience as registered nurses/midwives while six per cent (6.3%) of the respondents had experience of five years and below in this field as indicated in Table 4.11. By far the majority of respondents, (93.8%) had experience of ten years and above as registered nurses/midwives. The results confirm the expertise and extended skill and knowledge the healthcare professional respondents possessed served as surety that clients would receive quality CTOP services. The results further prove that allocating registered nurses/midwives with many years of experience in CTOP units is a reproductive health investment to ensure the delivery of quality termination of pregnancy services.

4.7.9 How many years of experience in this unit

The results of this statement indicated that fifty per cent (50%) of the respondents have above ten years of experience in this unit, while thirty-one per cent (31.3%) have less than ten years of experience and eighteen per cent (18.8%) have less than five years of experience in this unit as indicated in Table 4.11. The fifty per cent (50%) experienced nurses reflected by the results of this statement are an indication that quality is the central focus of CTOP services. The integration of the different years of experience indicated by the results of this statement shows the importance of sharing knowledge and skill in rendering quality CTOP services to improve women's reproductive health. CTOP nurses with less years of experience are mentored by the more experienced nurses to impart knowledge and skill which was gained over the years.

4.7.10 How many hours do you work?

Eighty-seven per cent (87.5%) respondents indicated that they worked eight hours a day; however, twelve per cent (12.5%) indicated that they worked a 12-hour shift as seen in Table 4.11. The majority of the respondents (87.5%) in the designated CTOP facility units thus worked eight hours per day. The results of this statement show that CTOP units have adopted the eight-hour shift which is suitable because CTOP service provision is approached as a day procedure. It was clear from the results that the CTOP units in public health facilities operate as outpatient clinics for eight hours per day during the week and are closed over weekends. Management should ensure that the hours of work are well planned to provide adequate coverage for the day and reduce fatigue among staff. CTOP nurses are expected to work forty hours per week which translates to eight hours per day since reproductive health services operate as outpatient services (Athawale 2015:22).

4.7.11 Allocation

The results of this statement show that forty-three per cent (43.8%) of the respondents rotate in allocation. Forty-three per cent (43.8%) indicated that their allocation was fixed and twelve per cent (12.5%) indicated that they do both as shown in Table 4.11. According to these results, the allocation of staff differs in the different public health facilities. The allocation of staff was influenced by the needs and acuity levels of clients admitted in the public health facilities. Rotation in allocation is a common practice in health facilities because of the challenges of staffing shortages (Dawson et al 2013:2). Registered professional nurses and midwives that rotate in other units gain experience that is helpful in times of crisis. The researcher assumed that facilities that were not busy would allocate CTOP nurses to other units to curb the shortage of staff.

4.7.12 Development on CTOP services

It is vital for healthcare professionals working in CTOP units to update their knowledge with regard to new development on how to render quality care by taking part in educational informative sessions such as workshops, congresses and symposiums. According to the results of this statement, thirty-seven per cent (37.5%) of the respondents indicated that mostly relied on in-service training while twenty-five per cent (25%) attended workshops and thirty-seven per cent (37.5%) was not exposed to any of the above. The 37.5% respondents who indicated they experienced no form of development in CTOP services is a course for concern. Training is necessary to impart skill and knowledge to healthcare professionals to enable them to carry out procedures with confidence. The development of guidelines for healthcare professionals in CTOP services should guarantee safety of clients and enhance efficiency in providing quality CTOP services.

SECTION B

4.8 STATEMENTS REGARDING THE QUALITY OF THE STRUCTURE OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES AS ASSESSED BY HEALTHCARE PROFESSIONALS

This section of the questionnaire contains items which required healthcare professionals to assess the quality of the structure of CTOP services in public health facilities. The healthcare professionals' assessments were viewed seriously since it would highlight areas of concern in the structure of CTOP services. It was expected that the information gathered from this population would yield an important baseline which could shape the future of CTOP services in public health facilities. Respondents were requested to agree or disagree with the statements by ticking "Yes" or "No" answers. The questionnaires will be discussed in exactly the same order as they are on the questionnaire and the statements will be quoted as it appears in Table 4.12.

Table 4.12 Assessment of the quality of structure of CTOP services in public health facilities by healthcare professionals in percentages *(n=16)*

NUMBER	ITEM	YES	NO
1.	The facility structure allows delivery of quality CTOP services	50.0	50.0
2.	The space provided for rendering CTOP services is adequate	31.3	68.5
3.	The CTOP unit is air-conditioned and well ventilated	31.3	68.8
4.	There is a post-CTOP rest room for clients	37.5	62.5
5.	There is a tea room for nurses	25.0	75.0
6.	There is a nurses' station in the unit	31.3	68.8
7.	The CTOP structure allows for privacy	62.5	37.5
8.	The CTOP environment is inviting	25.0	75.0

NUMBER	ITEM	YES	NO
9.	There is enough equipment for delivery of CTOP services	62.5	37.5
10.	There is new equipment in the CTOP unit	25.0	75.0
11.	Equipment maintenance is provided timeously	50.0	50.0
12.	The CTOP environment is clean	81.3	18.8
13.	There are enough registered professional nurses and midwives allocated to the CTOP units	25.0	75.0
14.	Registered professional nurses and midwives are trained in CTOP services	75.0	25.0
15.	Registered professional nurses and midwives in CTOP clinics rotate to other units	43.8	56.3
16.	The principle of skill mix is practiced in CTOP unit	56.3	43.8
17.	There is a programme in place to develop CTOP registered professional nurses and midwives	25.0	75.0
18.	Registered professional nurses and midwives in CTOP units are allocated to night duty	31.3	68.8
19.	There are incentives for registered professional nurses and midwives working in CTOP units	12.5	87.5
20.	CTOP registered professional nurses and midwives are allocated to other units	50.0	50.0
21.	Doctors are allocated to CTOP units to assist in case of an emergency	31.3	68.8
22.	CTOP services operate uninterrupted daily	75.0	25.0
23.	Many clients are seen daily in CTOP units	87.5	12.5
24.	Repeat patients are seen frequently in CTOP units	81.3	18.8
25.	CTOP clinics are easily accessible	62.5	37.5
26.	CTOP units operate for 12 hours per day	12.5	87.5

4.8.1 The facility structure allows delivery of quality CTOP service

The respondents were requested to state whether the facility structure allowed for the delivery of quality CTOP services. Fifty per cent (50%) indicated that it did and the other fifty per cent (50%) indicated that it did not.

4.8.2 The space provided for rendering CTOP services is adequate

According to sixty-eight per cent (68.8%) of the responses to this statement, the space provided for rendering CTOP services was not adequate while thirty-one per cent (31.3%) indicated that it was adequate. The majority of the respondents (68.8%) reported that space for rendering CTOP services was inadequate. Tvedt et al (2014:757) assert that a good infrastructure with adequate space maximises healthcare professionals' efforts to facilitate quality care which leads to improved patient outcomes.

4.8.3 The CTOP unit is air-conditioned and well ventilated

Sixty-eight per cent (68.8%) respondents to this statement indicated that the CTOP unit was not air-conditioned and not well ventilated. Thirty-one per cent (31.3%) indicated there was air-conditioning in the CTOP unit and it was well ventilated. To the majority of respondents (68.8%) the lack of air-conditioning and poor ventilation in CTOP units were problematic. CTOP units require good ventilation to prevent the spread of airborne infections as well as air-conditioners to circulate clean air (Mohammed, Dudek & Hamza 2013:1827).

4.8.4 There is a post-CTOP rest room for clients

This statement sought to determine whether a CTOP rest room for clients who had just had a pregnancy terminated was available. Sixty-two per cent (62.5%) of the respondents indicated that there was no post-CTOP rest room for clients while thirty-

seven per cent (37.5%) indicated that a post-CTOP rest room was available for clients. With the majority of respondents (62.5%) confirming that no post-CTOP rest room for clients was available the results to this statement concur with the prevailing view that currently CTOP clinics in public health facilities are not user-friendly and neither are they focused providing the best possible patient care. After termination of pregnancy, clients have to be moved to a rest room where they can be observed before being discharged (Pickles 2013:520). The unavailability of rest rooms for clients compromises quality care and contributes to unnecessary long waiting times which affects patient satisfaction.

4.8.5 There is a tea room for nurses

A seventy-five per cent (75%) response rate to this statement indicated that there was no tea room for nurses with twenty-five per cent (25%) indicating a tea room was available for nurses.

4.8.6 There is a nurses' station in the unit

According to the sixty-eight per cent (68.8%) responses to this statement, there was no nurses' station in the CTOP unit but thirty-one per cent (31.3%) indicated a nurses' station was part of the CTOP unit.

4.8.7 The CTOP structure allows for privacy

Sixty-two per cent (62.5%) respondents to this statement indicated that the CTOP structure did not allow for privacy with thirty-seven per cent (37.5%) confirming that the CTOP structure allowed for privacy. An infrastructure that does not make provision for privacy (as indicated by 62.5% of the respondents) is a major problem in a CTOP unit. It compromises the freedom of women to express their situation and needs to the

healthcare professional in a safe environment where they feel comfortable to talk openly and honestly (Church 2011:248). The lack of privacy is a critical issue in terms of quality CTOP service delivery and patient satisfaction.

4.8.8 The CTOP environment is inviting

According to seventy-five per cent (75%) of the respondents, the CTOP environment was not inviting. Only twenty-five per cent (25%) indicated that the CTOP environment was inviting. Most respondents (75%) indicated that public health facility CTOP units were dull, uninviting and isolated. Clients are more informed today and have expectations; they assess healthcare facilities by looking at its cleanliness, the comfort and attractiveness among others (Mosadeghrad 2012:251-254).

4.8.9 There is enough equipment for the delivery of CTOP services

Sixty-two per cent (62.5%) of the respondents indicated that there was enough equipment for the delivery of CTOP services while thirty-seven per cent (37.5%) responded negatively. A situation where there is not enough equipment for the quality and safe delivery of CTOP services as indicated by 37.5% of the respondents must be avoided. Most maternal mortalities and morbidities are attributable to backstreet abortions. Shortages of equipment may encourage women to seek unsafe and illegal methods of terminating a pregnancy. Therefore, the prioritisation of making proper equipment available in CTOP units is critical to discourage women from seeking alternative ways and methods to abort and risking their lives (Yeboah et al 2014:144).

4.8.10 There is new equipment in CTOP units

Seventy-five per cent (75%) of the responses indicated that there was no new equipment in CTOP units and twenty-five per cent (25%) indicated that there was new

equipment in CTOP units. As evidenced by the most (75%) responses, the majority of CTOP units in health facilities have up to date never received new equipment. The CTOP Act (92 of 1996), implemented 20 years ago in 1997, promotes a woman's reproductive right and choice to have an early, safe and legal abortion. The researcher suggests that working with old and unsafe equipment contradicts the affirmation in the Act that 'early, safe and legal abortion services' would be available.

4.8.11 Equipment maintenance is provided timeously

The respondents' responses to this statement were equally divided: fifty per cent (50%) responses indicated equipment maintenance was not provided timeously while the other fifty per cent (50%) indicated that equipment maintenance was provided timeously. The maintenance of CTOP equipment in public health facilities seems to be an arbitrary issue as the fifty-fifty per cent positive/negative results indicate.

4.8.12 The CTOP environment is clean

Eighty-one per cent (81.3%) respondents indicated that the CTOP environment was clean with a low eighteen per cent (18.8%) indicating that the CTOP environment was not clean. CTOP services are offered in a clean hospital environment to prevent infection as indicated by the majority (81.3%) of respondents.

4.8.13 There is enough registered professional nurses and midwives allocated to the CTOP units

Seventy-five per cent (75%) of the respondents indicated that there were not enough registered professional nurses and midwives allocated to the CTOP units. Twenty-five per cent (25%) indicated that there were enough registered professional nurses and midwives allocated to the CTOP units. Staffing shortages in CTOP units have been a

challenge since the legal implementation of CTOP Act (92 of 1996) as confirmed by the 75% responses to this statement. Termination of pregnancy is legalised, but that does not mean that it is morally acceptable to everyone; therefore stigma attached to CTOP can discourage nurses from being involved in abortion services (Lebese 2009:39).

4.8.14 Registered professional nurses and midwives are trained in CTOP services

Seventy-five per cent (75%) respondents indicated that registered professional nurses and midwives were trained in CTOP services while twenty-five per cent (25%) of the respondents indicated that registered professional nurses and midwives were not trained in CTOP services. The results of this statement reflected that the majority (75%) of the professional nurses and midwives were trained to increase their efficiency and effectiveness when providing termination of pregnancy services. Not all nurses working in CTOP services are trained as indicated by 25% of the responses. If not adequately prepared for the critical role they play in minimising the maternal mortality and morbidity rate, CTOP professional nurses and midwives may become disillusioned and disengage from participating in the planning and provision of future quality CTOP services delivery (Seboni et al 2013:6, Harries, Stinson & Orner et al 2009:2).

4.8.15 Registered professional nurses and midwives in CTOP clinics rotate to other units

According to fifty-six per cent (56.3%) responses to this statement, registered professional nurses and midwives in CTOP clinics did not rotate to other units and thus forty-three per cent (43.8%) respondents indicated that they did rotate to other units. The result of 43.8% respondents who indicated that rotation to other units occurred confirmed that currently staffing challenges are experienced in public health facilities.

4.8.16 The principle of skill mix is practiced in CTOP units

Fifty-six per cent (56.3%) responses to this statement showed that the principle of skill mix was practiced in CTOP units. The minority, namely forty-three per cent (43.8%) indicated that the principle of skill mix was not practiced in CTOP units. The latter result concurs with the CTOP Act (1 of 2008) which requires only registered professional nurses and midwives to procure termination of pregnancy services. Fifty-six per cent (56.3%) responses to this statement shows that the principle of skill mix is practiced in CTOP units however forty-three per cent (43.8%) indicated that the principle of skill mix is not practiced in CTOP units. The forty-three per cent (43.8%) of respondents indicated that skill mix was not practised in CTOP units concurs with the CTOP Act (Act 1 of 2008) which required only registered professional nurses and midwives to procure termination of pregnancy services.

4.8.17 There is a programme in place to develop CTOP registered professional nurses and midwives

According to seventy-five per cent (75%) of the respondents there was no programme in place to develop CTOP registered professional nurses and midwives. Only twenty-five per cent (25%) of the respondents indicated that there was a programme in place to develop CTOP registered professional nurses and midwives as indicated in Table 4.12. The majority of the respondents (75%) saw it as a future challenge for staffing in CTOP services if there was no programme in place to develop registered professional nurses and midwives in CTOP service delivery. Registered professional nurses and midwives must be accommodated and encouraged to develop – to acquire newly prescribed skills and to expand and extend their knowledge to “keep up with new client needs and changes in the legal framework” of service delivery in CTOP and reproductive health practice (Magowe et al 2016:115).

4.8.18 Registered professional nurses and midwives in CTOP units are allocated to night duty

This statement sought to determine whether registered professional nurses and midwives in CTOP units were allocated on night duty to which sixty-eight per cent (68.8%) indicated that they were not allocated on night duty. Thirty-one per cent (31.3%) indicated that they were allocated to night duty as it appears in Table 4.12. CTOP services are currently only operational during the day only as it is viewed as a day outpatient service.

The results on evaluating the association between structure and institution with regard to the above statement indicated that the majority of the respondents were not allocated to night duty. Seventy-six per cent (76.9%) from community centres, a hundred per cent (100%) from district hospitals, and eighty per cent (80%) from central hospitals concurred with these results. However, fifty per cent (50%) of respondents from tertiary hospitals reported to have been allocated to night duty. The Fisher's exact was 0.215 showing that there was no significance.

4.8.19 There are incentives for registered professional nurses and midwives working in CTOP units

Eighty-seven per cent (87.5%) respondents indicated that there were no incentives for registered professional nurses and midwives working in CTOP units while only twelve per cent (12.5%) indicated that there were incentives for registered professional nurses and midwives working in CTOP units as indicated in Table 4.12. There are no incentives attached to working in a CTOP unit in public health facilities as confirmed by the majority of respondents (87.5%). Importantly, the positive response from 12.5% of the respondents indicating there were indeed such incentives is perplexing because there are currently no incentives for nurses working in CTOP services in public health facilities.

4.8.20 CTOP registered professional nurses and midwives are allocated to other units

According to fifty per cent (50%) of the respondents, CTOP registered professional nurses and midwives were not allocated to other units. The other fifty per cent (50%) indicated that they were allocated to other units as indicated in Table 4.12. The respondents to this statement were from different levels of public health facilities. The 50% negative response to this statement indicated the critical staffing shortages in public health facilities led to the allocation of CTOP nurses to other units.

4.8.21 Doctors are allocated to CTOP units to assist in case of an emergency

Sixty-eight per cent (68.8%) responses indicated that doctors were not allocated to CTOP units to assist in case of an emergency. Thirty-one per cent (31.3%) indicated that doctors were allocated to CTOP units to assist in case of an emergency. The 68.8% negative responses to this statement revealed that the situation had not improved since 1997 due to the shortage of doctors. The remaining 31.3% of respondents indicated that doctors were allocated in CTOP units to assist in case of an emergency.

4.8.22 CTOP services operate uninterrupted daily

Seventy-five per cent (75%) respondents indicated that CTOP services operated uninterrupted daily however, the twenty-five per cent (25%) who responded negatively reported there were interruptions in their daily rendering of CTOP services.

4.8.23 Many clients are seen daily in CTOP units

Eighty-seven per cent (87.5%) responses to this statement showed that many clients were attended to daily in the CTOP units with twelve per cent (12.5%) responding negatively as shown in Table 4.12.

4.8.24 Repeat patients are seen frequently in CTOP units

According to eighty-one per cent (81.3%) of the responses, repeat patients are seen frequently in CTOP units but eighteen per cent (18.8%) disagreed with this statement. As the results of this statement show, the majority (81.3%) of respondents indicated that women use CTOP services as a contraceptive method. Mhlanga (2003:117) unequivocally states the CTOP Act (92 of 1996) “has a preamble, stressing that it would and should not be used as a method of contraception” adding that the passing of this Act was concomitant to “strengthening contraception services and providing alternatives to women who would not be desirous or able to bring up children from unwanted pregnancies”.

4.8.25 CTOP clinics are easily accessible

Sixty-two per cent (62.5%) respondents indicated that CTOP clinics were easily accessible with thirty-seven per cent (37.5%) responding negatively to this statement. The 37.5% negative responses to this statement indicate that accessibility to CTOP clinics obviously remains a challenge. Jacobs and Hornsby (2014:857) state the challenges that render CTOP services not being accessible in public health facilities.

4.8.26 CTOP units operate for 12 hours daily

Eighty-seven per cent (87.5%) responses to this statement revealed that CTOP units did not operate for 12 hours daily. Twelve per cent (12.5%) indicated that CTOP units

did operate for 12 hours daily. In public health facilities, CTOP services are provided for eight hours per day, five days a week. CTOP services are treated as outpatient day services. This means it is reasoned that CTOP is a short medical procedure – the client is booked in for a day, the procedure is done, and the client is discharged on the same day (Pickles 2013:531).

4.8.27 Areas that need improvement by healthcare professionals

With regard to the structure, eighty-six per cent (86%) of the respondents indicated that for the delivery of quality and safe CTOP adequate space is pivotal. Twenty-eight per cent (28.2%) responses indicated the need for an ablution block for clients. Thirty-five per cent (35.9%) of the respondents wanted more trained nurses allocated in CTOP units. Air-conditioning in the unit was mentioned by nine per cent (9.1%) of the respondents as in much need of attention. Forty-three per cent (43.2%) of the respondents indicated it was essential to have some form of incentive to attract CTOP nurses. A clients' rest room was indicated by twenty-five per cent (25.4%) of the respondents as an important factor to be addressed.

4.8.28 Challenges in CTOP area by healthcare professionals

Twenty-six per cent (26.8%) of the respondents indicated the high influx of patients and high rate of CTOP requests were challenges. CTOP repeats were indicated as a challenge by eighteen per cent (18.2%) of the respondents. Twenty-five per cent (25%) of the respondents indicated a challenge was clients who do not return for MVA. Second trimester pregnancy poses a challenge because it is not done in CTOP units as indicated by eighteen per cent (18.2%) of the respondents. Sixteen per cent (16.2%) of the respondents viewed the referral route of CTOP clients challenging. The shortage of staff is a challenge as indicated by nineteen per cent (19.6%) of the respondents while sixteen per cent (16.6%) indicated the lack of privacy in CTOP clinics as a challenge.

SECTION C

4.9 STATEMENTS REGARDING THE QUALITY OF THE PROCESSES OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES BY HEALTHCARE PROFESSIONALS

These questionnaires sought to assess the quality of the processes of CTOP services in public health facilities by healthcare professionals. The respondents were requested to indicate whether they agreed or disagreed with the statements by marking it as either “Yes” or “No”.

Table 4.13 Assessment of the CTOP processes by healthcare professionals in percentages *(n=16)*

NUMBER	ITEM	YES	NO
1.	Information with regard to service times are well displayed	75.0	25.0
2.	Clients are received warmly by staff	100	0.0
3.	Waiting time to receive service is monitored to improve quality	75.0	25.0
4.	Clients are counselled before CTOP	100	0.0
5.	There is compliance to the set CTOP standards	81.3	18.3
6.	Health education with regard to CTOP is given to clients	93.8	6.3
7.	Registered professional nurses and midwives display a positive attitude towards clients	100	0.0
8.	The procedure for procuring CTOP is explained to clients	93.8	6.3
9.	CTOP processes are assessed to ensure continuous quality care	87.5	12.5

NUMBER	ITEM	YES	NO
10.	Clients are offered post-CTOP counselling	93.8	6.3
11.	All clients' information is recorded to improve quality	93.8	6.3
12.	Nursing audits are done to improve quality of CTOP services	93.8	6.3
13.	Policies are followed when rendering CTOP services	87.5	12.5
14.	Client satisfaction surveys are conducted to improve quality of CTOP services	68.8	31.3
15.	CTOP information records are up to date	81.3	18.8
16.	CTOP standards, policies and protocols are user-friendly	93.8	6.3
17.	There are files with the latest CTOP information in the unit	62.5	37.5
18.	There are serious adverse events with the CTOP services	25.0	75.0
19.	Monthly meeting are held with all stakeholders	37.5	62.5
20.	There is an improvement in the knowledge about CTOP among clients	75.0	25.0
21.	There is a booking system in place	100	0.0
22.	Bookings are controlled to manage the clients	100	0.0

4.9.1 Information with regard to service times are well displayed

The respondents were requested to indicate whether information with regard to service times are well displayed to which seventy-five per cent (75%) agreed while twenty-five per cent (25%) respondents disagreed as indicated in Table 4.13. The displaying of information is crucial to ensure that women are well informed about the availability of the CTOP services.

4.9.2 Clients are received warmly by staff

According to all (100%) responses to this statement, clients were received warmly by staff as indicated in Table 4.13. According to the one hundred percent response rate to this statement, one can deduce that CTOP services are being considered part of reproductive health services. Clients are received warmly because nurses have adjusted and accepted CTOP services and are prepared to assist women with termination of pregnancy.

4.9.3 Waiting time to receive service is monitored to improve quality

Seventy-five per cent (75%) of the respondents indicated that waiting time to receive service was monitored to improve. Twenty-five per cent (25%) responded negatively. Waiting time is a service efficiency indicator that needs continuous monitoring to improve quality of care (Caldinhas & Ferrinho 2013:316).

4.9.4 Clients are counselled before CTOP

All (100%) respondents agree with the statement that all clients are counselled before CTOP procedure as indicated in Table 4.13. The overall response rate of 100% agreement is a clear indication that clients are counselled as required by the CTOP Act (1 of 2008).

4.9.5 There is compliance to the set CTOP standards

The respondents were requested to indicate whether there is compliance to the set CTOP standards. Eighty-one per cent (81.2%) respondents agreed that there was compliance but eighteen per cent (18.8%) disagreed as shown in Table 4.13. Compliance to set standards confirms that all processes are carried out in accordance with set policy oulines.

4.9.6 Health education with regard to CTOP is given to clients

According to ninety-three per cent (93.8%) responses, health education with regard to CTOP is given to clients. Only six per cent (6.2%) responded negatively as indicated in Table 4.13. The negative response (6.2%) of the respondents indicates that health education with regard to CTOP services does not reach all women. Strengthening of their health education with regard to CTOP services will improve women's reproductive health.

4.9.7 Registered professional nurses and midwives display a positive attitude towards clients

According to Table 4.13, all (100%) respondents, who were all registered professional nurses and midwives, displayed a positive attitude towards clients. The results indicated that by displaying a positive attitude towards their clients, registered professional nurses and midwives placed their female clients at the centre of the CTOP process by recognising their needs, showing respect and responding to the needs of the client which is key to accessing CTOP services to reduce maternal mortality and morbidity (Fathalla, 1999:2-3).

4.9.8 The procedure for procuring CTOP is explained to clients

By far the majority of respondents, namely ninety-three per cent (93.8%) responded that they explained the procedure for procuring CTOP to clients which left only six per cent (6.2%) negative responses. The procedure of procuring CTOP was explained to clients to gain cooperation and understanding as verified by most (93.8%) respondents.

4.9.9 CTOP processes are assessed to ensure continuous quality care

A response of eighty-seven per cent (87.5%) to this statement indicated that CTOP processes were assessed to ensure continuous quality care. Twelve per cent (12.5%) responded negatively as indicated in Table 4.13. The assessment of CTOP processes assists in identifying gaps and developing quality improvement plans to remedy the situation.

4.9.10 Clients are offered post-CTOP counselling

Ninety-three per cent (93.8%) responses to this statement indicated that clients were offered post-CTOP counselling with only six per cent (6.2%) responding negatively as indicated in Table 4.13. Post-CTOP counselling comprises informing women about their reproductive health rights, on condom use and other ways of preventing an unwanted pregnancy and this service needs to be strengthened to encourage women to prevent unwanted pregnancies.

4.9.11 All client's information is recorded to improve quality

A high ninety-three per cent (93.8%) responses to this statement indicated that all clients' information was recorded to improve quality of care. As shown in Table 4.13, six per cent (6.2%) responded negatively to this statement. The high majority of 93.8% respondents who agreed that accurate recording of all clients' information would assist in the future betterment of the CTOP services is an encouraging result.

4.9.12 Nursing audits are done to improve quality of CTOP services

According to ninety-three per cent (93.8%) of the responses to this statement, nursing audits were done to improve quality of CTOP services whereas six per cent (6.2%) responded negatively. The 93.8% respondents who confirmed that nursing audits were

done in CTOP units are indicative of the registered professional nurses' and midwives' motivation to streamline and better the quality of the processes in CTOP.

4.9.13 Policies are followed when rendering CTOP services

The responses of eighty-seven per cent (87.5%) to this statement indicated that policies were followed when rendering CTOP services. Twelve per cent (12.5%) responded negatively. A high 87.5% of the registered professional nurse and midwife respondents were familiar with the contents of the CTOP policy and followed the required steps when procuring termination of pregnancy services. However, the 12.5% negative responses signify there is a gap in following policies when rendering CTOP services.

4.9.14 Client satisfaction surveys are conducted to improve quality of CTOP services

Sixty eight per cent (68.8%) responses to this statement indicated that client satisfaction surveys are conducted to improve quality of CTOP services while thirty-one per cent (31.2%) of the respondents disagreed to this statement as indicated in Table 4.13. However, the sixty-eight per cent 68.8% positive responses to this statement is not convincing because there were no results of client satisfaction surveys conducted from the sample under study.

4.9.15 CTOP information records are up to date

According to eighty-one per cent (81.2%) responses to this statement, CTOP information records were up to date. Eighteen per of the cent (18.8%) of the respondents disagreed as seen in Table 4.13. Up-to-date CTOP information records are essential to assist with future approaches to the management of CTOP services. Therefore, looking at the trends captured in the records it is clear that the majority

(81.2%) respondents were aware of the importance of keeping clients' CTOP information records updated.

4.9.16 CTOP standards, policies and protocols are user-friendly

The respondents were requested to indicate whether CTOP standards, policies and protocols are user-friendly. Ninety-three per cent (93.8%) thought they were user-friendly and six per cent (6.2%) did not see it as user-friendly as shown in Table 4.13. The fact that by far the majority of respondents (93.8%) agreed that the CTOP standards, policies and protocols were user-friendly is a satisfying result.

4.9.17 There are files with the latest CTOP information in the unit

Sixty-two per cent (62.5%) responses to this statement indicated that there were files with the latest CTOP information in the units. Unfortunately, quite a high percentage of thirty-seven (37.5%) respondents indicated that there were no files with the latest CTOP information in the units. Although more (62.5% as opposed to 37.5%) respondents indicated that information on the latest developments regarding CTOP services was communicated to all healthcare professionals in the CTOP unit, it is a disappointing result that the majority percentage was not higher as these files are actually proof that the CTOP services provided are safe and of a high standard.

4.9.18 There are serious adverse events with the CTOP services

Seventy-five per cent (75%) respondents indicated that there were no serious adverse events with the CTOP services. This meant twenty-five per cent (25%) of the respondents indicated that there were serious adverse events with the CTOP services. Since the legalisation of CTOP services, guaranteeing that legal CTOP services were safe for women was paramount. Although a high 75% response rate indicates women's

safety was guaranteed, the 25% negative response rate is somewhat troublesome. It is possible to assume that the negative responses to this statement might have come from the young, inexperienced respondents who were not used to minor incidences such as a client presenting with excessive bleeding due to an illegal or backstreet abortion that went wrong. It is also important to consider that no two women's bodies will react the same to the termination of a pregnancy; but, whereas inexperienced, young registered nurses may experience an incident as 'serious' the experienced and knowledgeable ones will view it as a minor incident to be taken care of.

4.9.19 Monthly meetings are held with stakeholders

To this statement respondents were requested to indicate whether monthly meetings were held with stakeholders. Sixty-two per cent (62.5%) indicated that monthly meetings were not held with stakeholders and thirty-seven per cent (37.5%) indicated that monthly meetings were indeed held with stakeholders. Monthly meetings with stakeholders are important to discuss the challenges experienced in the unit with the aim of finding solutions. Unfortunately, the results show that the majority (62.5%) indicated that stakeholders did not hold meetings with CTOP nurses which is seen by the researcher as a serious shortcoming which needs to be rectified.

4.9.20 There is an improvement in the knowledge about CTOP among clients

A response of seventy-five per cent (75%) shows that there was an improvement in clients' knowledge about CTOP while twenty-five per cent (25%) responded negatively as reflected in Table 4.13**.** Improved CTOP knowledge will result in the reduction of termination of pregnancy; therefore, the 75% response rate indicating that clients did become more knowledgeable about CTOP is quite encouraging. On the other hand, the result that 25% of the respondents indicated that there was no improvement in the knowledge of CTOP among clients confirms there is still the challenge that many women who suffer because of an unwanted pregnancy are not aware that a legal CTOP

can be done; they might not know where it can be obtained or might not have access to a health facility which offers this service. This is a major concern for the researcher as many of these women turn to illegal abortionists or try to abort the foetus themselves which can increase the maternal mortality and morbidity rate in SA instead of decreasing it.

4.9.21 There is a booking system in place

According to all (100%) the respondents' responses, there was a booking system in place as indicated in Table 4.13. The result proves that a booking system which is in place and is followed can function fluently and successfully. Without a proper booking system the functioning of all the processes in any CTOP clinic will be chaotic thus hampering the delivery of efficient, effective and quality care.

4.9.22 Bookings are controlled to manage the clients

As indicated in Table 4.13 all the respondents (100%) indicated that bookings were controlled to manage the clients. Bookings allow the healthcare personnel to manage the number of clients seen per day. Managing the client flow in a smooth and orderly way allows enough time for the registered professional nurses and midwives to provide safe, quality CTOP services in a calm and controlled manner. CTOP clients who experience a CTOP procedure in a calm and controlled atmosphere are more satisfied with the quality and more likely to recommend the health facility to friends.

4.9.23 Areas of improvement in CTOP processes

As indicated in Table 4.13 all the respondents (100%) indicated that bookings were controlled to manage the clients. Bookings allow the healthcare personnel to manage the number of clients seen per day. Managing the client flow in a smooth and orderly

way allows enough time for the registered professional nurses and midwives to provide safe, quality CTOP services in a calm and controlled manner. CTOP clients who experience a CTOP procedure in a calm and controlled atmosphere are more satisfied with the quality and more likely to recommend the health facility to friends.

4.9.24 Challenges with CTOP processes

Requests for second trimester termination were seen by thirty-five per cent (35.9%) of the respondents as a major challenge. Twenty-five per cent (25%) indicated the lack of privacy at CTOP clinics as a challenge. The use of CTOP as a contraceptive method by clients was viewed by twelve per cent (12.5%) of the respondents as challenging.

For forty per cent (40%) of the respondents, requests for CTOP by high risk clients were challenges. Examples of high risk clients mentioned were women presenting with HIV, cancer of the cervix and post-caesarean section. Twenty per cent (20%) of the respondents noted that clients who did not come for follow-up after a CTOP procedure as a challenge while the referral system was seen by fourteen per cent (14.3%) of the respondents as a challenge in terms of the processes to be followed.

SECTION D

4.10 ASSESSMENT OF THE QUALITY OF THE OUTCOMES OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES BY HEALTHCARE PROFESSIONALS

These questionnaires sought to assess the quality of the outcomes of CTOP services in public health facilities by healthcare professionals. The respondents were requested to mark the “Yes” if they agreed with the statement or the “No” if they disagreed with the statement.

Table 4.14 Assessment of the outcomes of CTOP services in public health facilities by healthcare professionals *(n=16)*

NUMBER	ITEM	YES	NO
1.	CTOP services are satisfactory	81.2	18.8
2.	Nurses empathise with clients	100	0.0
3.	Clients are counselled before the procedure	100	0.0
4.	The procedure is explained to the client	100	0.0
5.	Clients ask questions related to CTOP services	100	0.0
6.	Clients are aware of their rights with regard to CTOP services	93.8	6.2
7.	Clients recommend others to usethe public service clinic	100	0.0
8.	Clients are completely satisfied with the nurses' service delivery	93.8	6.2
9.	Treatment is given post-CTOP procedure	100	0.0
10.	There is a change in the clients' health status after CTOP	81.2	18.8
11.	Effective CTOP outcomes are noted	100	0.0
12.	The public health facility is rated effective on CTOP management	81.2	18.8
13.	Registered professional nurses and midwives have a positive attitude towards clients	87.5	12.5
14.	Contraceptive are given post-CTOP	100	0.0
15	There is no infection post-CTOP in clients	93.8	6.2
16.	There is no report of complications post-CTOP	81.2	18.8
17.	Client and registered professional nurses and midwives relationships are good	100	0.0

NUMBER	ITEM	YES	NO
18.	There is mutual trust between clients and registered professional nurses and midwives	100	0.0
19.	There are few or no CTOP repeats	31.2	68.8
20.	Bleeding is minimal post-CTOP procedure	93.8	6.2

4.10.1 CTOP services are satisfactory

All respondents (100%) positively responded to this statement thereby confirming that they felt the provision of CTOP services were satisfactory as indicated in Table 4.14. The result confirmed both clients and healthcare professionals were totally satisfied with the procedure meaning there was a significant improvement in the quality of reproductive health services.

4.10.2 Nurses empathise with clients

The results of this statement again showed all respondents (100%) indicated that nurses empathised with clients as shown in Table 4.14. All participating nurses demonstrated empathy indicating that they had a better understanding of the predicament women found themselves in and were willing to assist in terminating unwanted pregnancies.

4.10.3 Clients are counselled before the procedure

The results shown in Table 4.14 show that a hundred per cent (100%) respondents positively indicated that clients were counselled before the CTOP procedure. This signified that all the respondents believed that counselling before termination of pregnancy ensured that clients were fully aware of their role in the practise of CTOP.

4.10.4 The procedure is explained to the client

According to the all respondents (100%), they explained the CTOP procedure to clients as indicated in Table 4.14. Explaining the procedure to clients ensured that they understood fully what was going to be done; because they knew what to expect during the procedure they cooperated fully which in turn assured the smooth management of the procedure.

4.10.5 Clients ask questions related to CTOP services

Respondents were requested to indicate whether clients asked questions related to CTOP services. All respondents (100%) reacted positively to this statement. This process assisted clients to feel their needs were attended to, their choice was respected and they gained more knowledge about CTOP services which they could share with their friends who found themselves in the same dire situation.

4.10.6 Clients are aware of their rights with regard to CTOP services

Considering that ninety-three per cent (93.8%) of the respondents' reaction to this statement was positive, the results confirm that the clients were aware of their rights with regard to CTOP services. However, six per cent (6.2%) of the responses were negative indicating not all women were emancipated as some were seemingly unaware of their rights. The results confirm women's' need to be continuously educated about their rights in matters of reproductive health still exists.

4.10.7 Clients recommend others to use public service CTOP clinics

All of the respondents (100%) agreed with this statement that clients recommended others to use the public service CTOP clinic as indicated in Table 4.14. Although it can be assumed that clients who had a positive experience are likely to recommend others

to use the same clinic to share the same positive experience, it was confirmed by all the current respondents that this is indeed the case. This tie in with the idea that if clients experience positive health outcomes they want to share their 'good' experience with others.

4.10.8 Clients are completely satisfied with the nurses' with service delivery

A response of ninety-three per cent (93.8%) to this statement showed that clients were completely satisfied with the nurses' service delivery. Only six per cent (6.2%) responded negatively*.* It is vital to recognise that client satisfaction is an important indicator of whether the health service meets all the client's needs. The results of this question confirm the majority of clients were completely satisfied with the nurses' service delivery.

4.10.9 Treatment is given post-CTOP procedure

A hundred per cent (100%) responses to this statement confirmed that treatment was given post-CTOP procedure as indicated in Table 4.14. Treatment was given to all clients post-CTOP to ensure they were free of pain and no infections developed.

4.10.10 There is a change in the clients' health status after CTOP

According to the results reflected in Table 4.14 eighty-one per cent (81.2%) responses to this statement indicated that there was a change in the clients' health status after CTOP. Eighteen per cent (18.8%) responses reflected there was no change in the clients' health status after CTOP. According to most responses (81.2%), the change in the client's health status was noted during counselling when most clients chose to use contraceptives thereby taking the responsibility upon themselves to prevent an unwanted pregnancy in future.

4.10.11 Effective CTOP outcomes are noted

The respondents were requested to indicate whether effective CTOP outcomes were noted - all (100%) responded positively. The results of this statement revealed that CTOP processes were reliable in managing unwanted pregnancies.

4.10.12 The public health facility is rated effective in CTOP management

Eighty-one per cent (81.2%) of the responses to this statement indicated that the public health facility was rated effective in CTOP management. There was an eighteen per cent (18.8%) negative response to this statement as indicated in Table 4.14. The majority of the respondents (81.2%) rated public health facilities as effective in CTOP management because there was complete expulsion of the products of conception. It is posited that the 18.8% who responded negatively might have had some negative experiences which influenced their decision to mark this statement as a “No”.

4.10.13 Registered professional nurses and midwives have a positive attitude towards clients

To this statement eighty-seven per cent (87.5%) responses indicated that registered professional nurses and midwives had a positive attitude towards clients and twelve per cent (12.5%) responded negatively. The majority (87.5%) thus perceived there was an improvement in the attitude of registered professional nurses and midwives towards CTOP clients. Unfortunately, a small percentage (12.5%) of respondents felt these nurses’ attitude towards CTOP clients was not as positive as it should be. It is important to address this challenge because the attitude of nurses towards CTOP clients plays an important role in respecting clients’ human rights and the promotion of CTOP services in health facilities.

4.10.14 Contraceptives are given post-CTOP

There was agreement among all (100%) respondents that contraceptives were given post-CTOP to clients as indicated in Table 4.14. This result indicates that clients were given contraceptives after terminating a pregnancy to prevent another unwanted pregnancy. The CTOP mandate requires that clients be given contraceptives after terminating a pregnancy.

4.10.15 There is no infection post-CTOP in clients

Ninety-three per cent (93.8%) responses indicated that there was no infection post-CTOP to clients and only six per cent (6.2%) disagreed with this statement as indicated in Table 4.14. The high response rate (93.8%) was positive as it indicated that public health facilities strive to deliver quality CTOP services to save women from contracting infections. However, the negative response of 6.2% is also important and cannot be ignored. In any speciality some clients do develop infections due to various reasons which cannot be predicted beforehand; these clients then require to be managed comprehensively to prevent further complications.

4.10.16 There is no report of complications post-CTOP

According to eighty-one per cent (81.2%) responses there was no report of complications post-CTOP; but, eighteen per cent (18.8%) respondents indicated complications had occurred post-CTOP. Medical termination of pregnancy in CTOP units in designated health facilities was therefore safe, effective and reliable according to the majority (81.2%) of respondents. The remaining 18.8% respondents' negative answers can be seen as *de facto* supporting the reality that with any medical intervention – and thus also in CTOP – some clients might present with complications post the procedure.

4.10.17 Clients', registered professional nurses' and midwives' relationships are good

The results reflected in Table 4.14 shows all (100%) respondents indicated that the relationships between clients, registered professional nurses and midwives were good. This is a positive results as good relationships between clients and registered professional nurses and midwives reflect unbiased willingness on the side of the healthcare professionals to assist women in need. On the other hand, clients feel at ease and comfortable to share experiences because there is a feeling of understanding between them and the CTOP personnel. The results of this statement further show acceptance of one another.

4.10.18 There is mutual trust between clients and registered professional nurses and midwives

This item examined whether there was mutual trust between clients and registered professional nurses and midwives. All respondents (100%) were positive as indicated in Table 4.14. The result of this statement is of significance since it implies that nurses are loyal and treat clients with respect.

4.10.19 There are few or no CTOP repeats

According to the results, thirty-one per cent (31.2%) respondents indicated that there were few or no CTOP repeats. However, the majority of sixty-eight per cent (68.8%) respondents indicated that there were no CTOP repeats at all. Even the 'few' repeats noted by 31.2% responses to this statement are unacceptable. Clients should not use legal CTOP as a contraceptive method. This is illegal behaviour and obviously remains a challenge in some CTOP units. Healthcare professionals have to strengthen education and encourage clients to use contraceptives to reduce repeat terminations of pregnancies.

4.10.20 Bleeding is minimal post-CTOP procedure

Ninety-three per cent (93.8%) respondents to this statement indicated that bleeding is minimal post CTOP procedure and six per cent (6.2%) did not agree.

4.10.21 Area of improvement in CTOP outcomes by healthcare professionals

According to fifty-three per cent (53.2%) of the responses felt that contraceptive use by clients should be improved. Fourteen per cent (14.3%) respondents encouraged clients to use condoms to improve contraception methods. CTOP repeats was indicated by fifty per cent (50.8%) of the respondents as an area that needs improvement. Eight per cent (8.3%) of the respondents indicated pain medication as an area in need of improvement.

4.10.22 Challenges in CTOP outcomes by healthcare professionals

Forty percent (40%) respondents indicated a challenge with high rate of college teenage pregnancy requesting CTOP. Twenty-four per cent (24.3%) indicated CTOP clients who did not come for follow-up after termination of pregnancy was a challenge. A client giving false information was a challenge indicated to twenty per cent (20%) of the respondents. Fourteen per cent (14.3%) respondents indicated to them a challenge was clients who absconded after induction from the CTOP clinic. Twenty per cent (20%) indicated CTOP clients who were from areas far from the health facility and without a residential address was a challenge.

According to forty per cent (40%), students using CTOP as a method of contraception was an area that posed serious challenges. Twenty-four per cent (24.3%) noted their inability for them as nurses because they were not allowed although qualified to assist in second trimester pregnancy was a major challenge. Thirty-four per cent (34.3%) of the respondents indicated the referral route for CTOP clients was a challenge.

PARTICIPANT SAMPLE THREE: POST-CTOP CLIENTS

SECTION E

4.11 DEMOGRAPHIC DATA AND CLIENT DATA ANALYSIS

This section presents the analysis of the client data. The Fisher's exact instrument used showed a scale reliability coefficient of 0.6956 which is accepted as reliable. Below is a table of the demographic data of the clients who participated in the study.

Table: 4.15 Section F Demographic data of clients in percentages *(n=72)*

NUMBER	AGE IN YEARS	YES
1.	18 – 20 years	35.6
	21 – 30 years	42.5
	31 – 40 years	19.2
	41 years and above	2.7
2.	**Marital status**	
	Single	87.5
	Married	4.2
	Live-in partner	8.3
	Widow	0.0
3.	**Current status**	
	Student/scholar	43.1
	Employed	25.0
	Not employed	30.6
	Housewife	1.4

NUMBER	AGE IN YEARS	YES
4.	**Which public health facility do you attend?**	
	Community health centre	30.6
	District hospital	20.8
	Regional hospital	
	Tertiary hospital	9.7
	Central hospital	38.9
5.	**How many children do you have?**	
	0	38.9
	1 - 2	43.1
	3 or more	18.1
6.	**How many times were you pregnant?**	
	Never	33.3
	Once	20.8
	Twice	23.6
	Three or more times	22.2

4.11.1 Age

The ages of the respondents who participated in the study were grouped in intervals of ten years; from 18 to 40 years as shown in Figure 4.6. Forty-one years and above were included to incorporate respondents above these years. Figure 4.23 shows the age distribution of the respondents: 35.6% respondents were between 18 − 20 years; 42.5% were between 21 − 30 years; 19.3% were between 31 − 40 years and 2.8% were 41 years and above as shown in Figure 4.6. Seventy-eight per cent (78.1%) of the respondents were young people under the age of 30 years. The results confirm that the most sexually active population group is younger people between 18 and 30 (78.1%). The respondents were female post-CTOP clients. Therefore, the result of a high percentage (78.1%) of young females requesting CTOP is a most troubling concern as it raises the question why so many young people do not practice safe sex if condoms

are freely available and reproductive health issues are constantly addressed in the mass media and healthcare facilities.

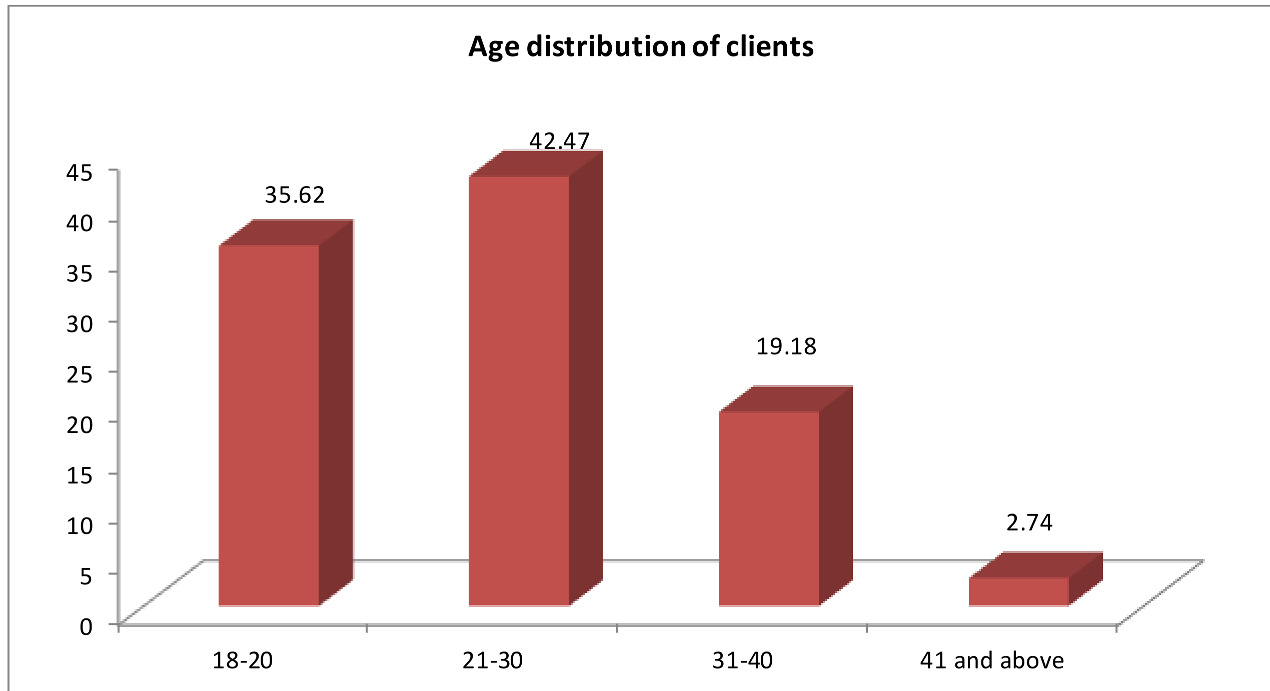

Figure 4.6 Age distribution of clients (n=72)

4.11.2 Marital status

The majority of the respondents, eighty-seven per cent (87.5%) were single. Married respondents constituted four per cent (4.2%) and eight per cent (8.3%) had a live-in partner as indicated in Figure 4.7. The highest number of termination of pregnancy was from the group of single females (87.5%) as indicated in Figure 4.24. The researcher's perception is that single females demonstrated irresponsible sexual behaviours without considering the consequences, namely unwanted pregnancies. The researcher assumes that the results pertaining to married respondents (4.2%) and respondents with live-in partners (8.3%) indicated a lack of knowledge or ignorance about contraceptive use. However, she is also aware that the issues of male domination (refusing to use condoms) and being unaware of their legal rights (human rights) might

play a role in requesting CTOP. This is quite a complex issue. On the one hand one may argue that these clients abuse CTOP services because they could have prevented the unwanted pregnancy by using protective measures; on the other hand, one cannot totally exclude the role that patriarchal and traditional factors play in family planning and sexual behaviours.

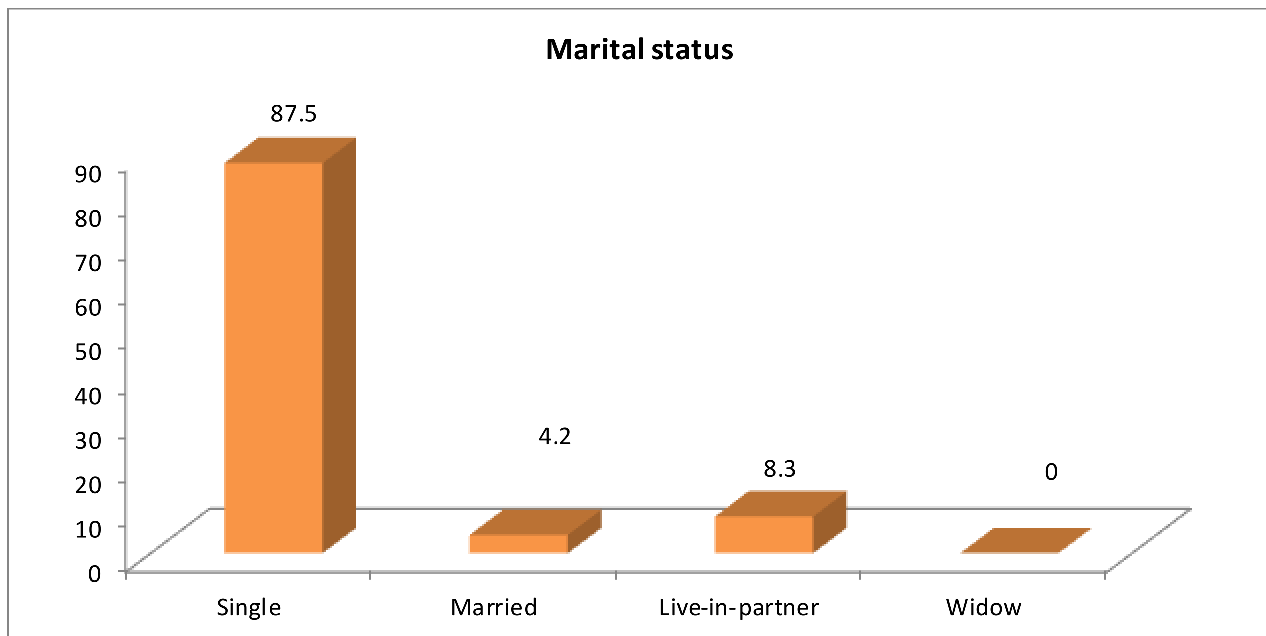

Figure 4.7 Marital status (n=72)

4.11.3 Current status

As shown in Figure 4.8, the results of this statement indicated that forty-three per cent (43.1%) of the respondents were scholars/students. Twenty-five per cent (25%) respondents were employed and thirty per cent (30.1%) were unemployed. One per cent (1.4%) of the respondents indicated that they were housewives. Of note in Figure 4.4 is that by far the majority of the respondents were not employed. This group comprised of scholars/students, housewives and respondents who indicated they were not employed. Hence, of the respondents 25% were employed as opposed to the 75% who were not employed (75%). Of the unemployed, the highest percentage (43.06%)

was students/scholars and followed by the unemployed (43.06%). It can be posited that unemployment and poverty are closely associated. Considering that Figure 4.8 shows the majority a of respondents (78.1%) were young females between 18 and 30 years old and Figure 4.8 shows the majority were single (87.5%), the possibility that young females participate in or are coerced to participate in unsafe sexual practices for money cannot be totally excluded. What is further implicated with these results is that young women are not aware of their rights and are not enlightened about safe sexual behaviours soon as they reach their reproductive age. A critical part of CTOP service delivery is sharing knowledge about reproductive health including preventing an unwanted pregnancy.

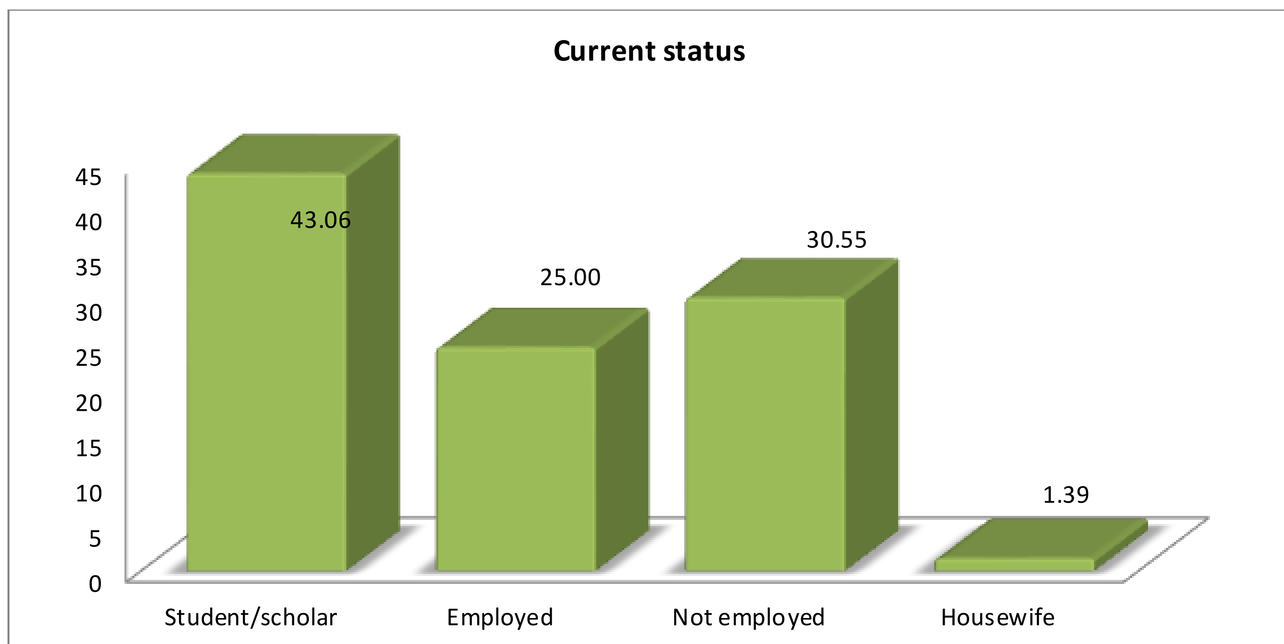

Figure 4.8 Current status (n=72)

4.11.4 Which public health facility do you attend?

Thirty per cent (30.6%) of the respondents indicated that they attended community health centres. Twenty per cent (20.8%) indicated that they attended district hospitals while nine per cent (9.7%) attended tertiary hospitals. Thirty-eight per cent (38.9%) of

the respondents indicated that they attended a central hospital as indicated in Table 4.15. The results of this statement indicate that most termination of pregnancy services (38.9%) is procured in a central hospital. CTOP services are a primary healthcare matter and the expectation would have been for community and district heath facilities to have high percentages in terms of requests for performance of CTOP services. Conversely, the added percentage of CTOPs provided in community health centres and district hospitals totals 51.4% and a combined total of 48.6% request CTOP services at tertiary and central hospitals. It seems there is not too much difference in the percentage of females living in rural areas and those who live in urban areas requesting CTOP in health facilities – requests for CTOP are more or less evenly spread across rural and urban areas in Gauteng.

4.11.5 How many children do you have?

With this statement the aim was to establish the number of children the respondents had. Thirty-three per cent (38.9%) of the respondents had no children. Forty-three per cent (43.1%) had between one and two children. Eighteen per cent (18.1%) of the respondents indicated that they had three or more children. This implies that 82% of the participants had a maximum of two children. According to the results, all participants with children or without children engaged in CTOP services. The results further show that 61.2% of the respondents who had children failed to use contraceptives to prevent unwanted pregnancies but chose termination of a pregnancy as a way out of their situation. However, since all respondents were post-CTOP, the results indicate that even those without children did not use contraceptives but had a CTOP to terminate a pregnancy or pregnancies.

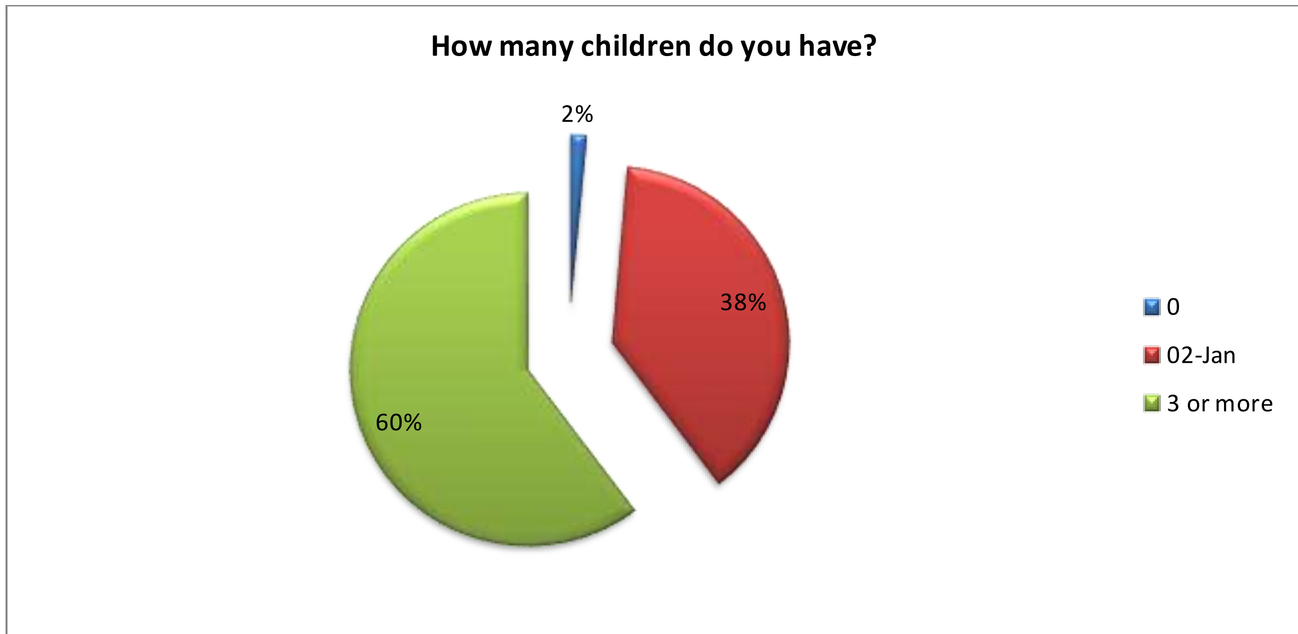

Figure 4.9 How many children do you have? (n=72)

4.11.6 How many times were you pregnant?

In response to the number of pregnancies, thirty-three per cent (33.3%) of the respondents indicated that they have never been pregnant. Twenty per cent (20.8%) indicated that they were pregnant once while twenty-three per cent (23.6%) of the respondents were pregnant twice. However, twenty-two per cent (22.2%) indicated that they were pregnant three times or more. The results showed that all participants did not use any method of contraception to prevent unwanted or unintended pregnancies but instead engaged in the termination of pregnancy services as a contraceptive method – in fact, 48.8% had repeat CTOPs confirming this statement. However, the CTOP Acts (92 of 1996; 1 of 2008) makes it very clear that CTOP services are not to be taken advantage of and seen as a method of contraception. Of interest is the confusing response of 33.3% respondents who indicated they had never been pregnant. It makes no sense because all client participants were post-CTOP. It is therefore not clear why a third of the respondents indicated they had never been pregnant. The researcher is of the opinion that falling pregnant is a choice that is made and preventing an unwanted

pregnancy is also a choice a woman makes. Therefore, she can only assume that clients who unintentionally fall pregnant do not know their legal rights, demonstrate an attitude of recklessness or ignorance with regard to their sexual activities, do not go for reproductive health counselling or if they do, they do not adhere to the treatment for pregnancy prevention.

SECTION F

4.12 STATEMENTS REGARDING THE QUALITY OF THE OUTCOME OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES BY CLIENTS

Table 4.16: Assessment of CTOP outcomes by clients in percentages (*n=72)*

NUMBER	ITEM	YES	NO
1.	CTOP services are helpful	98.6	1.4
2.	There is a warm welcome and welcoming feeling in the CTOP clinic in public health facilities	94.5	5.5
3.	Counselling is done before the CTOP procedure	100	0.0
4.	The CTOP procedure is explained before beginning with it	94.5	5.5
5.	You resume school/work immediately after the CTOP procedure	54.8	45.2
6.	CTOP can be done at 16 weeks	34.2	65.8
7.	You travelled far to access the CTOP services	32.9	67.1
8.	This is your first CTOP service	87.7	12.3
9.	You were given a follow-up date post-CTOP procedure	78.1	21.9

NUMBER	ITEM	YES	NO
10.	You bled after the CTOP procedure	78.1	21.9
11.	You felt relieved after the CTOP procedure	90.4	9.6
12.	Your pregnancy was terminated by a doctor in a public health facility	38.4	61.6
13.	You paid for the CTOP service	9.6	90.4
14.	Contraceptive were given after the CTOP procedure	86.3	13.7
15	A sonar was done before CTOP	89.1	10.9
16.	There is privacy in CTOP clinics in public health facilities	80.8	19.2
17.	CTOP services are offered over weekends and during public holidays	5.5	94.5
18.	You waited long on the CTOP booking list	10.9	89.0
19.	There is a post-CTOP rest room in public health facilities	52.1	47.9
20.	The pain is unbearable post-CTOP procedure	50.7	49.3
21.	CTOP is done in a clean environment	97.3	2.7
22.	You developed infection post-CTOP procedure	10.9	89.1
23.	You felt depressed after CTOP has been performed	20.6	79.4
24.	You were satisfied with the CTOP results	90.4	9.6
25.	You will tell friends about CTOP	84.9	15.1

4.12.1 CTOP services are helpful

According to the results of Table 4.16, ninety-eight per cent (98.6%) of the respondents indicated that making use of CTOP services were helpful and only one per cent (1.4%) disagreed. The results undoubtedly confirm almost all the respondents had their pregnancies successfully terminated. The 1.4% negative response implies the

termination of pregnancy was denied due to it being an advanced pregnancy or other unknown reasons.

4.12.2 There is a warm welcome and a welcoming feeling in the CTOP clinic in public health facilities

Ninety-four per cent (94.5%) respondents felt there was a warm and welcoming feeling in the CTOP clinic in public health facilities which left five per cent (5.5%) negative responses. Most (94.5%) of the respondents confirmed that they terminated their pregnancies in public health facilities where they were not judged but enveloped in warmth by the healthcare providers. A warm and friendly welcoming make the CTOP experience less traumatic for clients and they appreciate healthcare professionals displaying a positive attitude towards them.

4.12.3 Counselling is done before the CTOP procedure

All (100%) responses to this statement indicated that counselling was done before the CTOP procedure as shown in Table 4.16. Hence, there was a 100% agreement among respondents that the CTOP staff all complied with the set standards in the CTOP clinics because counselling forms part of the comprehensive treatment offered in CTOP services. Counselling also assists clients to make guided decisions without being coerced.

4.12.4 The CTOP procedure is explained before beginning with it

According to ninety-four per cent (94.5%) of the respondents to this statement, the CTOP procedure was explained before beginning with it. Only five per cent (5.5%) disagreed with the statement. The importance of fully explaining the CTOP procedure to clients was emphasised by the majority (94.5%) because it prepares clients mentally

and emotionally for the procedure; they know what to expect. Clients demand to be respected and informed thus explaining the CTOP procedure becomes a fulfilling experience for them.

4.12.5 You resume school/work immediately after the CTOP procedure

A little over half of the respondents, fifty-four per cent (54.8%), indicated that they were able to resume school/work immediately after the CTOP procedure thus signifying it was safe and effective. However, quite a high forty-five per cent (45.2%) of the respondents marked the answer as "No". The researcher assumes that those who disagreed with the statement might have experienced some health challenges which prevented them from resuming duties immediately after terminating their pregnancy.

4.12.6 CTOP can be done at 16 weeks

Sixty-five per cent (65.75%) respondents marked that that CTOP cannot be done at 16 weeks with the remaining thirty-four per cent (34.25%) respondents indicating that it can be done at 16 weeks. The results revealed a gap in knowledge regarding the weeks at which CTOP can be procured as indicated by quite a number (34.25%) of respondents. Correct information regarding weeks at which to request for the termination of pregnancy should to be given to women.

4.12.7 You travelled far to access the CTOP service

While sixty-seven per cent (67.1%) responded that they did not travel far to access the CTOP services thirty-two per cent (32.9%) acknowledged they had to travel quite a distance to access the CTOP service. One of the main reasons why just over one-third of the respondents incurred travelling costs and had to spend time to access CTOP services is that closer public health facilities do not have operational CTOP clinics which

is a problematic issue as far as accessible reproductive health services and termination of pregnancy are concerned.

4.12.8 This is your first CTOP service

According to a high eighty-seven per cent (87.7%) of the respondents, it was the first time they made use of CTOP services. Twelve per cent (12.3%) indicated it was not their first visit to the CTOP unit. Considering that all respondents were post-CTOP participants, the high number (87.7%) of respondents who attended the CTOP units in the healthcare facilities for the termination of a pregnancy highlights the lack of knowledge among the majority of young women of childbearing age on contraceptives to prevent unwanted pregnancies. Also of concern is the lower percentage (12.3%) who indicated that it was not their first termination of an unwanted pregnancy. The findings of the responses to this question support two challenges. Firstly, young women are either ignorant or not interested in making use of family planning services to prevent unwanted pregnancies and, secondly, they use CTOP services as a contraceptive method. This is an unacceptable and highly challenging viewpoint on the side of young women and men.

4.12.9 You were given a follow-up date post-CTOP procedure

According to seventy-eight per-cent (78.1%) of the responses to this statement, clients were given a follow-up date post CTOP procedure. Twenty-one per cent (21.9%) of the respondents disagreed with this statement. Follow-up dates are very important in monitoring that the health status of the client is good. The minority (21.9%) respondents who were given a follow-up date might have not honoured the follow up date because they felt they are in good health.

4.12.10 You bled after the CTOP procedure

Of the respondents seventy-eight per cent (78.1%) indicated that they bled after the CTOP procedure while twenty-one per cent (21.9%) indicated that they did not bleed after the CTOP procedure. The results revealed that clients' bodies react differently to CTOP, a successful ctop procedure bleeds mildly as most responses (78.1%) show, but clients should be warned that it is important to report excessive bleeding; they should be encouraged to report such bleeding timeously to commence treatment to stop the bleeding.

4.12.11 You felt relieved after the CTOP procedure

Ninety per cent (90.4%) responses indicated that respondents felt relieved after the CTOP procedure and nine per cent (9.6%) reported they did not feel relieved after the procedure. A high percentage (90.4%) confirmed that most women are, in fact, relieved after terminating an unwanted pregnancy.

4.12.12 Your pregnancy was terminated by a doctor in a public health facility

A sixty-one per cent (61.6%) positive response showed that the pregnancy was not terminated by a doctor with thirty-eight per cent (38.4%) of the responses indicating that their pregnancies were terminated by a doctor in a public health facility. In most public health facilities, termination of pregnancy up to 12 weeks is procured by trained registered professional nurses and midwives as indicated by the majority (61.6%) responses. Those whose pregnancies were terminated by a doctor (38.4%) might have presented with second trimester pregnancies or could have had presented with a problem that needed a doctor to intervene. Doctors procure CTOP on high risk women or those with complications (Harries, Lince, Constant, Hergey & Grossman 2011:9).

4.12.13 You paid for the CTOP service

This statement sought to determine whether clients paid for CTOP services. Ninety per cent (90.4%) did not pay but nine per cent (9.6%) did pay as indicated by the results. It is important to keep on making it known in communities that free and safe CTOP services are available in public health facilities. Respondents who marked they had paid for the termination of their pregnancies (9.6%) might have visited a private hospital or paid for an illegal abortion. Whatever the case might have been, this was not addressed in the questionnaire because the information needed pertained to whether pregnant women knew CTOP services were done free in public healthcare facilities.

4.12.14 Contraceptives are given after the CTOP procedure

Eighty-six per cent (86.3%) of the respondents indicated that contraceptives were given after the CTOP procedure**.** Thirteen per cent (13.7%) responded negatively as indicated in Table 4.16. The most appropriate time to initiate contraception to prevent an unwanted pregnancy is immediately after terminating a pregnancy. This was done as confirmed by the majority of respondents (86.3%). However, since reproductive health is an integral and important part of CTOP services, the expectation would be that all participants (100%) would have agreed they were given contraceptives after termination of their pregnancies. Thirteen per cent responded negatively to this statement thereby showing inconsistency in giving contraceptives after the CTOP procedure.

4.12.15 Sonar was done before CTOP

According to eighty-nine per cent (89.1%) of the respondents to this statement, sonar was done before CTOP. With ten per cent (10.9%) no sonar was done as shown in Table 4.16. Sonar is done prior terminating a pregnancy to estimate the correct gestational age of the pregnancy. The negative responses by ten per cent (10.9%)

respondents indicate a gap in the processes followed when terminating a pregnancy. Sonar must be done as stipulated in the CTOP Act (1 of 2008).

4.12.16 There is privacy in CTOP clinics in public health facilities

The majority of respondents, namely eighty per cent (80.8%), experienced privacy in CTOP clinics in public health facilities while nineteen per cent (19.2%) did not. Knowing the status of the CTOP units in public health facilities, the statement by the majority (80.8%) that privacy posed no problem is not convincing. Public health facilities have infrastructural challenges making it difficult to provide privacy in CTOP clinics. Therefore, the lower percentage (19.2%) is more truthful because privacy is still lacking which compromises the quality of CTOP services rendered.

4.12.17 CTOP services are offered over weekends and during public holidays

Ninety four per cent (94.5%) of the respondents indicated that CTOP services were not offered over weekends and during public holidays; only five per cent (5.5%) indicated that CTOP services are offered over weekends and during public holidays. The results of the majority (94.5%) concur with the practice in CTOP clinics in public health facilities. The rest of the respondents (5.5%) who indicated that CTOP services were offered over weekends and public holidays affirm that some clients receive misinformation or simply do not know because they never make use of the reproductive health services available in the CTOP units.

4.12.18 You waited long on the CTOP booking list

Eighty-nine per cent (89.1%) respondents indicated that they did not wait long on the CTOP booking list while ten per cent (10.9%) indicated that they had to wait a long time on the CTOP booking list as shown in Table 4.16. According to the positive responses

(89.1%), most respondents felt their waiting time on the booking list was manageable; CTOP services are thus believed to be effective in terms of managing waiting time. However, those who indicated they waited too long (10.9%) confirm that a challenge still exists to better the booking system.

4.12.19 There is a post-CTOP rest room in public health facilities

Only fifty-two per cent (52.1%) of the respondents agreed there was a post-CTOP rest room in public health facilities. Almost half of the respondents, namely forty-seven per cent (47.9%) indicated there were no rest rooms for post-CTOP clients thereby concurring with the present reality that the infrastructure of CTOP clinics in public health facilities is of an insufficient standard. The fifty-two per cent (52.1%) respondents who indicated that there was a CTOP rest room might not have understood what a 'rest room' is.

4.12.20 The pain is unbearable post-CTOP procedure

Half of the respondents, fifty per cent (50.7%) indicated the pain was unbearable and the other half's, forty nine per cent (49.3%) responded that the pain was bearable post-CTOP procedure as indicated in Table 4.16. The issue of suffering unbearable pain after the CTOP procedure as noted by half (50.7%) of the respondents compromises the quality of CTOP services. Proper assessment of clients' post-CTOP condition with the focus on managing the pain successfully needs to be done post-CTOP.

4.12.21 CTOP is done in a clean environment

The response of ninety-seven per cent (97.7%) to this statement indicated that CTOP was done in a clean environment. A low two per cent (2.7%) responses indicated that CTOP was not done in a clean environment. Since its legalisation, CTOP services have

been designated to public health facilities where a clean environment was considered a priority to ensure safe termination of unwanted pregnancies. The majority (97.3%) responses confirmed this was still the case. Up to date the provision of CTOP services has been provided in clean CTOP units which contribute to patient safety and satisfaction.

4.12.22 You developed infection post-CTOP procedure

Eighty-nine per-cent (89.1%) of the respondents indicated that they did not develop infection post-CTOP procedure while ten per cent (10.9%) indicated that they did develop infection post-CTOP procedure. It is possible that those who responded negatively (10.9%) might not have completed the course of antibiotics or clients who reported to have developed an infection might have had the same problem before the pregnancy termination but were not treated for it.

4.12.23 You felt depressed after CTOP has been performed

Seventy-nine per cent (79.5%) respondents did not feel depressed after CTOP had been performed but twenty per cent (20.6%) indicated that they felt depressed after termination of pregnancy. It can be posited that the twenty per cent (20.6%) who reported they felt depressed after CTOP might not have received sufficient counselling – or possibly no counselling at all – which should have supported and assisted them to make the right decision they felt right for them.

4.12.24 You were satisfied with the CTOP results

According to the results shown in Table 4.16, ninety per cent (90.4%) respondents indicated that they were satisfied with the CTOP results while nine per cent (9.6%) indicated dissatisfaction with their CTOP results. The finding that the majority of the

respondents (90.4%) were satisfied with their CTOP results confirms that a reliable as well as an effective CTOP procedure guarantees client satisfaction.

4.12.25 You will tell friends about CTOP

Eighty-four per-cent (84.9%) respondents confirmed they would tell friends about the CTOP services provided in the health facility while fifteen per cent (15.1%) shared they would not tell friends about it. Obviously, from this finding it can be deduced that a high percentage (84.9%) of the respondents experienced the CTOP services provided as pleasant, safe and satisfactory and they would recommend visiting the healthcare facility for the termination of a pregnancy. The minority (15.1%) who indicated they would not tell their friends might be attributed to secrecy in that they did not want the former to know that they engaged in termination of pregnancy services.

4.12.26 What clients felt needed to be improved in CTOP units

Nineteen per cent (19.2%) of the respondents would like general structural improvements to be done to the CTOP unit or clinic. Twelve per cent (12.3%) desired improvement specifically to the toilet facilities for clients while forty-one per cent (41.1%) felt there was a dire need for bathroom facilities in CTOP units where they could wash and clean themselves after having undergone a CTOP procedure. Ten per cent (10.9%) of the respondents wished for an infrastructure where privacy for CTOP clients was guaranteed. Improvements to the client rest rooms were suggested by thirty-three per cent (33.9%) of the respondents. Only five per cent (5.5%) mentioned that the number of nurses allocated in the CTOP area should be increased and four per cent (4.1%) felt the choice on contraceptives for clients needed attention. Interestingly, the negative attitude of cleaners and clerks was mentioned by six per cent (6.9%) of the respondents as an area that needed improvement.

4.12.27 Clients' perception of the challenges in CTOP units

The method of contraception was indicated as a challenge by one per cent (1.4%) of the respondents. For twenty-eight per cent (28.8%) the unexpected and unbearable pain was challenging. Ten per cent (10.9%) responded that the lack of a resting place after CTOP was a problem. The fact that there was no privacy in the CTOP clinics and CTOP units in public health facilities was a seriously inconvenient and embarrassing problem for nine per cent (9.6%) of the respondents. According to twelve per cent (12.3%) of the respondents, heavy bleeding after CTOP was a challenge they were not prepared for. Five per cent (5.5%) felt toilets were located too far from the CTOP unit while the unavailability of bathroom facilities to freshen up after CTOP was perceived by five per cent (5.5%) as a problematic issue. Thirteen per cent (13.1%) of the respondents indicated experiencing side effects like nausea, vomiting, headache, sweating, tiredness, dizziness, restlessness or insomnia after CTOP as uncomfortable. Experiencing such side effects can to a certain extent – but not exclusively – to the accumulation of stress and emotional strain clients with an unwanted pregnancy suffered over a period of time before presenting for CTOP services.

4.13 SUMMARY OF THE RESULTS

4.13.1 CTOP Structure

The results highlighted the findings from the assessment of the structure, processes and outcomes of CTOP services in public health facilities as per the three population groups namely: health facility and quality managers, healthcare professionals and The results of the assessment of the CTOP structure by facility and quality managers revealed that most managers believed that the CTOP structure is adequate for rendering quality CTOP services, but air-conditioning and proper ventilation are challenges. The structure somewhat allowed for privacy for client/nurse communication regarding reproductive health services and preparation for the CTOP. However, bearing

in mind that need to feel safe and comfortable when discussing reproductive health matters or the possibility of having a CTOP done, 'adequate' privacy is not enough – they need total privacy. Legally, the provision of privacy is a priority factor in reproductive health services. A slight majority of the managers indicated that equipment was adequate but almost all managers indicated the servicing of equipment was not up to standard. Importantly, new equipment was not available in community centres and central hospitals. The CTOP unit was inviting and clean with a tea room for nurses; however, the fact that structurally there was no rest room for a client post-CTOP was a concern for some facility and quality managers. Some health facilities operated without a nurses' station and there was no designated waiting area for clients.

According to the results, half of the healthcare professionals' (professional nurses and midwives agreed the CTOP structure in public health facilities allowed for the rendering of quality CTOP services while the other half disagreed. The healthcare professionals also observed there was no tea room for the nurses, the environment seemed dull and a small percentage indicated that provision of privacy was lacking. The shortage of registered professional nurses in CTOP units was a significant problem which jeopardised quality CTOP services and care – often the rotation of CTOP nurses to other units due to the overall shortage of professional nurses in whole health facility aggravated the problem in the CTOP unit. Further issues highlighted by the information obtained from the healthcare professionals included not receiving incentives, not having doctors allocated to take charge of second trimester terminations, the high influx of patients to be seen on a daily basis (eight hours per day; five days per week) and, to a lesser extent, skill mix which existed in the CTOP unit. Repeat requests for CTOP from some clients were worrisome to the healthcare personnel as was the fact that that no developmental programme for nurses was in place.

4.13.2 CTOP Processes

The facility managers' assessment of the CTOP processes revealed the displaying information regarding the operational times of the CTOP services was a shortcoming. A

positive result was that all managers agreed daily monitoring of client waiting times and providing counselling before a CTOP as well as post-CTOP was done in an effort to improve service quality. All clients' information was recorded, nursing audits were done and existing policies were followed during the process of CTOP service delivery. Auditing remains the best nursing tool used to identify gaps in the process of care rendered. Serious adverse events did not occur. In fact, healthcare professionals demonstrated a caring, unbiased attitude towards all clients and treated them with respect. The public health facility managers did indicate that monthly meetings with CTOP nurses were not held which is unfortunate. Further results indicated compliance with the other items assessed.

The responses of healthcare professionals on the assessment of processes confirmed that monthly meetings with management did not take place. The healthcare professionals wanted more trained nurses allocated to the CTOP unit because of the many patients they saw on a daily basis. It was extremely problematic for healthcare professionals to deal with repeat clients. Although the CTOP service delivery process includes discussing reproductive health matters with clients (making them aware of their rights; explaining the importance of using condoms or alternative contraceptive methods to prevent an unwanted pregnancy), healthcare professionals indicated some clients would not adhere to follow-up bookings and would later request another CTOP. To the healthcare professionals this indicated that clients used CTOP as a contraceptive method. The results from the healthcare professionals confirmed CTOP processes were assessed to ensure continuous quality care and client files were kept up-to-date.

4.13.3 CTOP Outcomes

Forty six percent (46%) of the managers indicated a challenge with repeat CTOP that are seen in the public health facilities. All items assessing outcomes seemed satisfactory.

Assessment of outcomes by healthcare professionals revealed a challenge with CTOP repeats that are attended in the CTOP clinic. Clients' not honouring follow up dates has been expressed as a challenge by healthcare professionals.

Outcomes assessment by clients' revealed satisfaction with the items assessed.

4.14 CONCLUSION

This chapter outlined the results of the analysed data using descriptive statistics. The study population was health facility and quality managers, healthcare professionals and clients in public health facilities in the Tshwane district. Chapter five will present interpretation of Fisher's exact results.

CHAPTER 5

DISCUSSION OF FISHERS' TEST RESULTS

5.1 INTRODUCTION

The previous chapter presented the quantitative results. The aim of the quantitative approach was to assess the quality of the CTOP structure, determine the quality of the CTOP processes and to evaluate the quality of the CTOP outcomes. The sample included facility managers, quality managers, registered professional nurses and post-CTOP clients. A cross-sectional survey was used to collect data which was analysed with the assistance of the statistician using STATA version 14 software computer program.

5.2 DISCUSSION OF FISHER'S EXACT RESULTS

Fisher's exact is a statistical test used in the analysis of tables where the sample size is small. It examines the significance association of the results (Wong et al 2014:279). According to Polit and Beck (2013:421) Fisher's exact is used to test the significance of differences in proportions. In this study the Fisher's exact results indicated significance when the value was between 0.000 and 0.005. Any score above 0.005 was perceived to be marginal in significance.

The questionnaires consisted of items which required information on the quality of the structure, processes and outcomes of CTOP services. The Fisher's exact results evaluated the association between structure, processes and outcomes relating to institutions, health professionals, the allocation of health professionals and development on CTOP services to identify areas of significance as indicated in Table 5.1. The same

approach will be used to evaluate the Fisher's exact results association with clients per age, marital status, institutions, number of pregnancies and number of children.

Table 5.1 Evaluation of association between structure with institutions, category health professionals, allocation of health professionals and development on CTOP services: Fisher's exact *(n=104)*

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
1.	The facility structure allows delivery of quality CTOP services	0.43	0.08*	0.24	1.0
2.	The space provided for rendering CTOP services is adequate	0.22	0.5	0.42	0.38
3.	The CTOP unit is air-conditioned and well ventilated	0.92	0.84	0.48	1.0
4.	There is a post-CTOP rest room for clients	0.70	0.24	0.07*	0.76
5.	There is a tea room for nurses	0.95	0.052	0.06*	0.11*

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
6.	There is a nurses' station in the unit	0.68	1.0	1.0	0.074*
7.	The CTOP structure allows for privacy	0.83	0.52	0.06*	0.65
8.	The CTOP environment is inviting	0.70	0.86	0.66	0.82
9.	There is enough equipment for delivery of CTOP service	0.9	0.20*	0.32	0.47
10.	There is new equipment in CTOP unit	0.055*	0.86	0.16*	0.08*
11.	Equipment maintenance is provided timeously	0.023	0.15*	1.0	0.27
12.	The CTOP environment is clean	0.92	0.57	0.77	0.82

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
13.	There are enough registered professional nurses and midwives allocated to the CTOP units	0.4	1.0	0.62	1.0
14.	Registered professional nurses and midwives are trained in CTOP services	0.49	0.86	1.0	1.0
15.	Registered professional nurses and midwives in CTOP clinics rotate to other units	0.035	0.36*	0.01	1.0
16.	The principle of skill mix is practised in CTOP unit	0.67	0.47	0.51	0.37

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
17.	There is a programme in place to develop CTOP registered professional nurses and midwives	0.5	0.07*	1.0	1.0
18.	Registered professional nurses and midwives in CTOP units are allocated to night duty	0.22	0.5	0.083*	0.38
19.	There are incentives for registered professional nurses and midwives working in CTOP units	0.75	0.8	0.51	0.23
20.	CTOP registered professional nurses and midwives are allocated to other units	0.40	0.40	0.36	0.87
21.	Doctors are allocated to CTOP units to assist in case of an emergency	0.071*	0.20	0.83	0.56

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
22.	CTOP services operate uninterrupted daily	0.059*	0.20	1.0	0.61
23.	Many clients are seen daily in CTOP units	0.24	0.26	1.0	0.79
24.	Repeat patients are seen frequently in CTOP units	0.020	0.24	0.66*	0.71
25.	CTOP clinics are easily accessible	0.81	0.89	1.0	0.73
26.	CTOP units operate for 12hrs. daily	0.42	0.69	0.04	0.66

5.2.1 Evaluation of association between responses on CTOP structure by institutions

The highlighted areas of significance will be discussed, namely availability of a tea room for nurse, timeous maintenance of equipment, rotation of professional nurses to other units, repeat patients seen frequently and CTOP units operating for 12 hours every day. Considering the responses, it is clear that they varied significantly between institutions with respect to equipment maintenance, rotation of registered professional nurses and midwives in CTOP units and repeat patients seen frequently in CTOP units.

5.2.1.1 Equipment maintenance is provided timeously

The Fisher's exact results (0.023) indicated a significant association between the provision of timeous maintenance of equipment and institutions. Maintenance of

equipment came up very strongly and the results revealed that maintenance of equipment is not provided timeously in CHC and district health facilities. The results also revealed that maintenance of equipment is prioritised to tertiary and central hospitals only. Non-adherence to the timeous maintenance of equipment has a negative impact on the quality of CTOP services rendered (Oshiyama, Silveira, Bassani & Bassani 2014:68).

The equipment used in health facilities plays a pivotal role in the provision of patient care. Public health facilities are dependent on safe, reliable equipment that is in working condition to facilitate quality patient care as stated by Mutia et al (2012:9). It is therefore crucial for proper, timeous equipment maintenance to be prioritised in CTOP services to prevent clients from seeking illegal and unsafe methods of terminating a pregnancy. Prioritising equipment maintenance will further prevent healthcare professionals from forgetting their skill to operate it due to the unavailability of equipment and the black of practice (Tumasang et al 2014:530).

The maintenance of equipment should be prioritised at all levels of health facilities to ensure continuity of quality and uncompromised CTOP services (Mutia et al 2012:17). The current management of equipment maintenance as revealed by the results in public health facilities has a negative impact on the quality of CTOP services that patients receive. Proper, thorough and timeous equipment maintenance increases the effectiveness of the equipment which enhances the efficiency of patient treatment. Conversely, the downside of equipment maintenance as pointed out by Miguel-Cruz, Rios-Rincon and Haugan (2014:193) is that the maintenance of medical equipment is increasingly expensive and therefore it is more cost saving to replace non-functional equipment. Therefore, public health facilities should have a standard operating procedure as guidance to assure the timeous maintenance of equipment.

5.2.1.2 Registered professional nurses and midwives in CTOP clinic rotate to other units

According to Fisher's exact results (0.035), there was a significant association between the rotation of CTOP nurses and the institutions where they worked. Community health centres and central hospitals indicated that CTOP nurses rotated to other units to provide nursing care.

The rotation of CTOP nurses to other units is a strategy used by many public health facility managers to improve nurse's performance because it affords them the opportunity to develop other skills and knowledge thus having a positive effect on their learning in practice (Mohan 2015:209). Discussing the rotation of nurses working in CTOP units requires a closer look at the benefits for the nurses and the institutions as well as the challenges involved for both parties.

It is important to support CTOP nurses to rotate to other units because it is an empowering process and opens up opportunities for further personal and professional growth. On the other hand, it is difficult to recruit nurses to work in CTOP units. In this regard, the rotation of nurses is an effort to try and curb the shortage of staff by exposing as many nurses as possible to different units to gain additional skill and knowledge. In support of the aforementioned, Partanen (2014:5) states rotation to other units promotes the professional competence of an individual. However, the challenges that occur with the rotation of CTOP nurses to other units in public health facilities can be detrimental factors to quality and safe patient care.

Based on a nurse's ethical right to conscientious objection as contained in the CTOP Act (92 of 1996) (Harries et al 2009:2), it is difficult to find nurses who have the right personal and professional attitude towards induced abortion to allocate in CTOP units (Harries et al 2009:2). There is a strong feeling that nurses who work in CTOP units should not be rotated because they have played a pivotal role in saving the programme from collapsing when others refused to work in these units. It is therefore postulated that it would be more advantageous if nurses working in other units are rotated to the CTOP unit for exposure to a new skill and augmenting their scope of knowledge. Attending to

nurses' rotation between units in public health facilities from this point of view will benefit the delivery of CTOP services in that a pool of knowledgeable and skilled nurses will be available to assist in case crisis situations arise.

5.2.1.3 Repeat patients are seen frequently in CTOP units

The Fisher's exact result (0.020) showed significant association between repeat patients seen frequently in CTOP units and institutions. Central and tertiary hospitals as well as CHC reported a high number of repeat patients were seen in their daily consultations. However, district health facilities reported less numbers of repeat patients were seen as revealed in the results.

Repeat CTOPs have risen at an alarming rate and it has become a public reproductive health challenge (Thapa 2015:2-4). The repeat termination of pregnancies practiced by women of child-bearing age is perceived as being irresponsible and impacts negatively on both human and material health resources. Most women requesting CTOP services have terminated a pregnancy before. Helena, Otupiri and Larson-Reindorf (2016:8) state the lack of family planning counselling services post termination of pregnancy is a leading cause of repeat CTOP requests. These authors point out that those using contraceptives can avert repeat requests to terminate a pregnancy.

The contribution of Prata, Holston, Fraser and Melkamu (2013:57) to this discussion is significant. These authors argue that limited access to contraceptives often leads to reliance on repeat termination of pregnancies to control fertility. The stance of Prata et al (2013:63) is that post termination of pregnancy counselling should be offered to all clients to address the challenge of repeat termination of pregnancy requests and, during counselling, focused attention should be paid to factors contributing to women requesting repeat termination of pregnancy to strengthen the use of contraceptives.

A study by Upadhyay, Brown, Sokoloff and Raine (2012:57) revealed that most women requesting repeat termination of pregnancy believed their return to fertility would be delayed.

The position that Harries et al (2009:7) take in the discussion is that contraception is "couched in terms of failure – failure of the public health sector to provide effective services and failure on the part of clients to use contraceptives." By implication this means health education and counselling on reproductive health should perhaps be more inclusive – making women aware of their legal right to take responsibility of their own reproductive health and to use preventive measures to prevent an unwanted pregnancy is a worthy cause; however, considering the socioeconomic and cultural hardship many women who request repeat CTOP services endure need to be incorporated into the counselling services post termination of pregnancy. Targeting specifically women who have many children, are poorly educated, are either very young or very old, or who are subjected to gender discrimination (WHO 2011:29) Women should be educated on the use of contraceptives on their level of understanding not only how they can benefit but also that it is their right to choose using contraceptives to prevent unwanted and repeat request for terminating pregnancies.

5.3 EVALUATION OF ASSOCIATION BETWEEN RESPONSES ON CTOP STRUCTURE BY CATEGORY OF HEALTHCARE PROFESSIONALS

5.3.1There is a tea room for nurses

Significant association of response was observed to vary between categories of healthcare professionals on the item that relates to availability of a nurses' tea room. The Fisher's exact results (0.052) indicated a significant association between healthcare professionals and the availability of a tea room for nurses. The results indicated the facility and quality managers agreed there was a tea room for nurses. From the responses to this statement it was clear that management did not make rounds to observe the structural challenges that compromise rendering quality CTOP services. The structural challenge in public health facilities renders the CTOP services inadequate in providing a healthy working environment.

The CTOP structure is deficient because it cannot provide a tea room for nurses which indicates it is non-compliant to the basic needs of a healthy working environment. In Chapter Two of the Basic Conditions of Employment Act (20 of 2013) it is stipulated clearly that employees should be allowed to have breaks after every five hours when doing work continuously; however, it is not the case in the CTOP clinic in public health facilities because no provision has been made for a tea room for healthcare personnel where they can relax and unwind. A well-structured CTOP unit should provide a tea room for the CTOP healthcare professionals to have tea breaks. Management should be encouraged to attend to the needs of CTOP nurses in order to increase productivity.

5.4 EVALUATION OF ASSOCIATION BETWEEN RESPONSES ON CTOP STRUCTURE BY CATEGORY OF ALLOCATION

Views differed between allocation, registered professional nurses and midwives in CTOP clinics rotating to other units and CTOP units operating for 12 hours daily.

5.4.1 Registered professional nurses and midwives in CTOP clinics rotate to other units

The Fisher's exact results (0.01) indicated a significant association between the rotation of registered professional nurses and midwives in CTOP clinics to other units by allocation. Both registered professional nurses and midwives in rotation or fixed allocation indicated that CTOP nurses rotate to other units.

The rotation of CTOP nurse to other units is usually due to staff shortage and impacts negatively on CTOP services. Public health facilities should be staffed adequately to prevent rotation of CTOP nurses to other units. However, the researcher is of the opinion that rotation of nurses is important to change the attitude and experience of the nurses towards the CTOP unit.

5.4.2 CTOP units operate for 12 hours daily

The Fisher's exact results responses (0.04) to this statement showed a significant association between the allocation and CTOP units operating for 12 hours daily. CTOP units are day services and operate during working hours between 07.00 and 16.00 daily for five days in a week. The CTOP services are classified under outpatient also known as ambulatory services. These units offer minimal or non-invasive short procedures that can be provided in outpatient units including CTOP services. Consultation hours in outpatient units are different from those in the wards in a health facility.

Athawale (2015:59) supports the outpatient approach in CTOP clinics because it balances the registered professional nurses' workload, reduces clients' waiting time and reduces overcrowding in the health facility. The needs and acuity level of clients that are seen in the CTOP unit are well suited with the current day services approach (Brandenburg, Gabow, Steele, Toussaint & Tyson 2015:4). The CTOP units in public health facilities operate like outpatients departments where clients that are seen do not warrant admission. Minor surgery is performed in CTOP units that allow the client to be discharged at the end of the day.

5.5 EVALUATION OF ASSOCIATION BETWEEN RESPONSES ON CTOP PROCESSES BY CATEGORY OF HEALTHCARE PROFESSIONALS

Table 5.2 Evaluation of association between processes, institutions, category of health professionals, allocation of health professionals and development on CTOP services [Level of significance = 0.012 - 0.034]

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
1.	Information with regard to service times are well displayed	0.04	0.46	0.56	0.86

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
2.	Clients are received warmly by staff	0.32	0.14	1.0	1.0
3.	Waiting time to receive service is monitored to improve quality	0.69	0.84	0.77	0.034*
4.	There is compliance to the set CTOP standards	0.33	1.0	1.0	0.12
5.	Health education with regard to CTOP is given to clients	0.54	1.0	1.0	0.15
6.	Registered professional nurses and midwives display a positive attitude towards clients	0.32	0.14	1.0	1.0
7.	The procedure for procuring CTOP is explained to clients	0.28	0.34	1.0	0.38
8.	CTOP processes are assessed to ensure continuous quality care	0.86	0.38	1.0	1.0
9.	Clients are offered post-CTOP counselling	0.32	1.0	0.32	0.15
10.	All clients' information is recorded to improve quality	1.0	1.0	1.0	0.15

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
11.	Nursing audits are done to improve quality of CTOP services	0.86	0.54	0.64	1.0
12.	Policies are followed when rendering CTOP services	0.43	1.0	1.0	1.0
13.	Client satisfaction surveys are conducted to improve quality of CTOP services	0.75	1.0	0.32	0.61
14.	CTOP information records are up to date	0.82	1.0	1.0	1.0
15.	CTOP standards, policies and protocols are user-friendly	1.0	1.0	0.58	0.46
16.	There are files with the latest CTOP information in the unit	0.012*	0.75	0.69	1.0
17.	There are serious adverse events within the CTOP services	0.69	0.37	0.034*	0.51
18.	Monthly meeting are held with all stakeholders	0.16	0.75	0.84	0.64
19.	There is an improvement in the knowledge about CTOP among clients	0.42	.062	0.68	0.27

5.5.1 Information with regard to service times are well displayed

The Fisher's exact results (0.04) showed a significant association between institutions and well displayed information regarding CTOP service times to ensure women are informed about when to visit the clinic for assistance. The results of this statement revealed that central, tertiary and CHC display information adequately, however, in district health facilities information was not displayed well.

Promoting safe termination of pregnancy has been a major concern of public health facilities. Information is the best intervention tool in health to inform clients of the service times in a health facility. The Constitution of the Republic of South Africa (Act 108 of 1996) supports the fundamental right to access of information and seeks to promote a culture of transparency and accountability in the public as well as private sector.

Banerjee, Andersen, Navin and Mathias (2015:9) support displaying of information by stating that it will reach most women in need of safe and quality termination of pregnancy services. The way in which information is obtained about CTOP services plays an important role in how efficiently it is used. Bakelaar's (2013:191 & 218) opinion in the discussion on information display is that of encouraging the display of non-misleading information regarding termination of pregnancy services to clients.

Road shows have been used successfully to share quality information and are found to reach a large group in a short space of time. Becker and Olavarrieta (2013) reveal that adequate information is provided to clients regarding CTOP services but also acknowledges that unsafe practices will not be eradicated soon. The quality of information obtained from professionals differs from other types of information and is important in preventing unwanted pregnancies as stated in (Denisov et al 2012:9). Healthcare professionals should encourage sharing of correct information to avoid misleading women in matters of reproductive health.

5.5.2 There are files with the latest CTOP information in the unit

Files with the latest information to improve the management of CTOP services are important. The Fisher's exact results (0.012) showed a significant association between institutions and the availability of files with the latest CTOP information in the unit.

The latest development regarding CTOP services should be communicated to all health facilities rendering CTOP services to ensure compliance and improvement of the quality of CTOP services (WHO 2012:21). Research is done and the findings should be communicated to improve the quality of CTOP services. According to the results of this statement, central, tertiary and CHC reported to have files with the latest information however district health facilities reported to have no files containing the latest information but district health facilities reported they had no such files with the latest information available. This is a cause for concern since district health facilities are falling behind with regard to the new developments aiming to improve CTOP services.

At present, the most recent information on CTOP services is that of inserting an Implanon implant to prevent unwanted pregnancies after terminating a pregnancy. De Tolly and Constant (2014) provide the latest information on the use of cellular phones to follow up CTOP clients and reminding them to do self-assessment. This technological advancement is useful as it assists the client to avoid returning to the health facility for a check-up thereby relieving the burden on clients and healthcare professionals. Clearly, CTOP services should investigate such available information for possible investment to enhance efficiency and reduce unwanted and repeat requests for termination of pregnancy. Sakwa and Oloko (2014:266) state effective information should be received accurately in terms of content and meaning by the sender.

5.5.3 There are serious adverse events within CTOP services

The Fisher's exact results (0.034) of this statement indicated a significant association between the presence of serious adverse events within CTOP services and allocation.

The results of this statement from both rotating and fixed allocation staff indicated there were no serious adverse events within the CTOP services.

Shuaib and Alharazi (2012:13) state evidence exists proving that legal methods of terminating a pregnancy are safe and efficient. After termination of pregnancy, women are seen continuing with their daily chores without showing signs of discomfort. The discussion is supported by Giri, Srivastav and Sharma's (2015:23) assertion that the success rate of CTOP services under supervision in health facilities is high, safe, effective and efficient. Therefore, women should be encouraged to access CTOP services from designated health facilities to prevent serious adverse events as advised by Lafort & Donaldson (2013:12). If a serious adverse event does occur in health facilities, the advantage is that it can receive immediate attention from a team of healthcare professionals who are readily available.

Serious adverse events in termination of pregnancy services should be avoided at all costs because it is more expensive to treat than to terminate a pregnancy. A study by Ngo, Free, Le, Edwards, Pham, Nguyen and Nguyen (2014) highlights bleeding and drug reaction as an immediate CTOP complication while a delayed complication would be, for example, in the form of pelvic infection. Women should be warned of what to expect in order to report immediately for urgent medical attention.

5.5.4 Waiting time to receive service is monitored to improve quality

Waiting times are a challenge facing many public health facilities and are usually linked to poor performance. Waiting times have a direct impact on the clients' experience in a health facility. The Fisher's exact results (0.034) to this statement indicated a significant association between waiting time to receive service is monitored and CTOP development. The results showed attending in-service attesting that waiting time to receive service is monitored to improve quality of CTOP services however, attending workshop responded negatively.

Citing that once a decision is made to terminate her pregnancy, a woman would like to have the procedure done immediately or as soon as possible, McLemore, Desai, Freedman, James and Taylor (2014:597) found women still complained about the long waiting times and, in the authors' opinion, rightfully so. Waiting time has a seriously negative impact on the outcomes of termination of pregnancy services as it has been established in many studies that a long waiting time allows the pregnancy to progress beyond the prescribed termination dates. Prolonged waiting time encourages women to risk their lives by seeking illegal and unsafe methods of terminating a pregnancy. Karasek, Roberts and Weitz (2016:65) confirm that long waiting times cause women to put their lives in danger by requiring CTOP services elsewhere. A valuable contribution made by Becker and Olavarrita (2013) is that reducing the waiting time in CTOP services will prevent women from seeking unsafe methods of terminating a pregnancy. Monitoring waiting time is necessary to improve the performance of the CTOP services and enhance the reproductive health of women. Waiting time is a performance indicator and monitoring it will improve the efficiency of CTOP services as reported by Mark, Wolf, Edelman and Castleman (2015:55).

Atnafu, Mariam, Wong, Awoke and Wondimeneh (2015:4) share that the introduction of an appointment system significantly reduced waiting time and improved client satisfaction. Therefore, CTOP services should be rendered on time to meet the clients' expectations. Monitoring waiting time assists with identifying gaps in the system; monitoring waiting times can thus also be a useful tool to guide the development of quality improvement strategies to address the findings. The stance of Okyere, Annan and Anning (2015:30) that time measures efficiency in almost every organisation therefore encourages the monitoring of waiting time to improve quality of service delivery in CTOP units.

Managing waiting time is important to satisfy CTOP clients by meeting their expectations. If waiting time is managed efficiently and can be reduced effectively, it will have a positive influence on the quality of CTOP services rendered. Women requesting termination of pregnancy services are challenged when they are expected to wait.

Reducing the waiting time in CTOP units is welcomed because it will improve women's reproductive health.

Table 5.3 Evaluation of association between outcomes, institutions, category of health professionals, allocation of health professionals and development on CTOP services [Level of significance 0.042]

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
8.	Clients are completely satisfied with the nurses' service delivery	0.28	0.34	1.0	0.38
9.	There is a change in the clients' health status after CTOP	0.73	1.0	1.0	0.82
10.	Effective CTOP outcomes are noted	0.59	0.09.	1.0	1.0
11.	The public health facility is rated effective on CTOP management	1.0	1.0	0.52	0.82
12.	Registered professional nurses and midwives have positive attitude towards clients	0.16	0.38	0.64	0.074
13.	There is no infection post-CTOP to our clients	0.042*		0.55	1.0

NUMBER	ITEM	INSTITUTION	H/PROF	ALLOCATION	DEVELOP
14.	There is no report of complications post-CTOP	0.061	0.34	1.0	0.12
15.	Clients, registered professional nurses' and midwives relationships are good	0.32	0.14	1.0	1.0
16.	There are few or no CTOP repeats	0.46	0.41	0.093	0.75
17.	Bleeding is minimal post CTOP procedure	0.54	1.0	1.0	0.15

5.5.5 There is no infection post-CTOP to our clients

The Fisher's exact results (0.042) reflected a significant association of clients who do not develop infection after the termination of pregnancy procedure.

Legalisation and procuring of CTOP services from designated health facilities have reduced the development of infections that causes maternal morbidity and mortality. The CTOP Act (1 of 2008) gives very clear directions on how to achieve quality CTOP services and prevent infections. The CTOP procedure is done by qualified and well-trained healthcare professionals under sterile conditions. Women should be encouraged to request CTOP services from a hygienically clean and safe environment such as a health facility to prevent the development of an infection.

Prescribing prophylactic treatment to all CTOP clients to reduce infections after termination of pregnancy is obviously successful (Panke, Bonilha, Silva De Loreto & Savaris (2014:100). Authors such as Ngo et al (2013:16) and Elsayed (2014:174) contribute to the discussion by substantiating that infections nowadays rarely occur with medical termination of pregnancy and this enhances the success rate. The absence of infection confirms improvement of the quality of CTOP services for the betterment of

women's reproductive health. The safety and efficicacy which medical termination of pregnancy provides rule out the development of infections (Cleland, Creinin, Nucatola, Nshom & Trussell (2013:169). For these reasons, CTOP services are recommended because they are safe, free and procured from health facilities where precautionary measures are taken to prevent of infection.

Table 5.4 Evaluation of association between outcomes, clients' age, marital status, institution, number of pregnancies and number of children [Level of significance 0.004]

NUMBER	ITEM	AGE	MARITAL	INSTITUTION	NO/ PREG	NO CHILD
1.	Information with regard to service times are well displayed	0.57	1.0	0.61	0.21	1.0
2.	Clients are received warmly by staff	0.81	1.0	1.0	0.40	1.0
3.	Clients are counselled before CTOP	0.71	1.0	0.45	0.39	0.83
4.	There is compliance to the set CTOP standards	0.89	0.15	0.11	0.053	0.14
5.	Health education with regard to CTOP is given to clients	0.59	0.32	0.00	0.13	0.073

NUMBER	ITEM	AGE	MARITAL	INSTITUTION	NO/ PREG	NO CHILD
6.	Registered professional nurses and midwives display a positive attitude towards clients	0.25	0.20	0.08	0.04	0.06
7.	The procedure for procuring CTOP is explained to clients	0.11	1.0	0.67	0.48	0.57
8.	CTOP processes are assessed to ensure continuous quality care	0.83	0.41	0.003*	0.45	0.3
9.	Clients are offered post-CTOP counselling	0.8	0.004*	0.008	0.79	0.70
10.	All clients' information is recorded to improve quality	0.82	1.0	0.25	0.41	0.68
11.	Nursing audits are done to improve quality of CTOP services	0.95	0.22	0.033*	0.48	0.48
12.	Policies are followed when rendering CTOP services	0.73	1.0	0.40	0.35	0.87

NUMBER	ITEM	AGE	MARITAL	INSTITUTION	NO/ PREG	NO CHILD
13.	Client satisfaction surveys are conducted to improve quality of CTOP services	0.67	0.74	0.65	0.90	0.60
14	CTOP information records are up to date	0.70	1.0	0.10	0.33	0.55
15.	CTOP standards, policies and protocols are user-friendly	0.078	0.37	0.50	0.93	0.46
16.	There are files with the latest CTOP information in the unit	0.71	1.0	0.40	0.30	0.67
17.	There are serious adverse events with the CTOP services	0.12	0.68	0.59	0.84	1.0
18.	Monthly meeting are held with all stakeholders	0.18	0.2	0.00*	0.56	1.0
19.	There is an improvement in the knowledge about CTOP among clients	0.75	0.57	0.60	0.34	0.11

NUMBER	ITEM	AGE	MARITAL	INSTITUTION	NO/ PREG	NO CHILD
20.	There is a booking system in place	0.21	1.0	0.60	0.6	0.5
21.	Bookings are controlled to manage the clients	0.24	0.26	0.012*	0.36	0.26

5.5.6 There is compliance to the set CTOP standards

Under evaluation of association between outcomes the following areas of significance as identified will be discussed, namely: clients, age, marital status, institutions, number of pregnancies and number of children. Compliance to set CTOP standards, health education with regard to CTOP is given to clients, registered professional nurses and midwives display a positive attitude, CTOP processes are assessed to ensure continuous quality care, clients are offered post-CTOP counselling, nursing audits are done to improve quality of CTOP services, monthly meetings are held with stakeholders and bookings are controlled to manage the clients flow.

5.5.7 Clients are offered post-CTOP counselling

The Fisher's exact result (0.004) indicated a significant association between offering post-CTOP counselling and marital status. The responses to this statement by both single and married respondents signified that post-CTOP counselling was indeed offered to clients. The respondents noted that post-CTOP counselling helps women to take responsibility for their approach and behaviour in matters of reproductive health.

Thapa & Neupane (2013:383) state they found post-CTOP counselling positively generated an interest in many women to start using contraceptives immediatetly after terminating the pregnancy. Counselling after termination of pregnancy seems to be the

best time to sell the idea of contraceptive use and ensuring women own up the responsibility of reducing unwanted pregnancies.

In the opinion of Purcell, Cameron, Lawton, Glassier and Harden (2016:171), post-CTOP counselling is the ideal opportunity for reproductive healthcare personnel to encourage the increase of the uptake of contraceptives to reduce unwanted pregnancies. It also emerged from the study of Purcell's that women seemed to appreciate counselling about contraception after termination of pregnancy; it motivated them to start using contraceptives and taking responsibility for their reproductive health. Importantly, they found post-CTOP reproductive health counselling acceptable, but only if provided in a non-judgemental way. At the same time it is worrying to know that, as Matulich, Cansino, Culwell and Creinin (2014:39) report, some women are not interested to have post-CTOP counselling and refuse to be given information about it. This confirms an important issue raised by Harries et al (2009:302) before, namely "failure on the part of clients to use contraceptives". It is thus not the reproductive healthcare service delivery that fails, but failure and irresponsibility on the part of women towards preventing unwanted pregnancies.

Lundell, Öhman, Frans, Helström, Högberg, Nyberg, et al (2013:4) report that few women developed post-traumatic stress after termination of pregnancy requiring counselling services. However, little is known about the relationship between post-traumatic stress and termination of pregnancy. The researcher believes that post-CTOP counselling is important in assisting women to understand reproductive health and contraception better. During this period women commit themselves to using contraceptives to prevent unwanted pregnancies.

5.5.8 Health education with regard to CTOP is given to clients

The Fisher's exact results of this statement (0.00) indicated a significant association between giving health education to clients with regard to CTOP services to improve women's reproductive health and institutions. The results of this statement indicated

health education regarding CTOP was given at central and tertiary institutions, but none at district and very little at CHC facilities.

Health education is the key to informing women on how and where to access help when faced with an unwanted pregnancy. Banerjee, Anderson, Buchanan and Warvadekar (2012:2) argue that the underutilisation of reproductive health services is due to limited information and the lack of health education to clients on the availability of reproductive health services.

Women who receive health education regarding the availability of CTOP services make decisions that benefit their reproductive health and they seem more successful to find solutions to their reproductive health problems. Inadequate health education has a negative impact on women's reproductive health decisions. A woman who has been given the necessary health education regarding CTOP services will use the knowledge she gained to control and improve her reproductive health. Lidaka, Viberga and Stokenberga (2015:2) blame the existence of CTOP challenges on a lack of health education to improve women's knowledge with regard to CTOP services. Undoubtedly thus, CTOP nurses have an important role to play in providing health education which will contribute to safe reproductive health practices. The most important health education in reproductive health is prevention of unwanted pregnancies and the use of contraceptives.

5.5.9 CTOP processes are assessed to ensure continuous quality care

Continuous assessment of the CTOP processes is important for improvement in the quality of care to assure women are better serviced in matters of reproductive health. The Fisher's exact results (0.003) revealed significant associations between continuous assessment of CTOP processes to improve the quality of care and institutions. All public health facilities in this study indicated the undertaking of continuous assessment of CTOP processes to improve the quality of care.

According to Prata, Holston, Fraser and Melkamu (2013:63), continuous assessment leads to the introduction of safe, efficient and effective CTOP processes to improve the quality of women's health. Health facilities are challenged to provide the best health services; they therefore embark on continuous assessment of the processes in place to improve the quality of care rendered. In addition, Huda, Ahmed, Ford and Johnston (2015:2) identified the need to increase health facilities to offer CTOP services to save women through continuous assessment. Continuous assessment has prompted doctors to come up with the suggestion for medical doctors to provide CTOP services outside the health system for women experiencing access problems (Mark et al 2015:1).

Continuous assessment is mandatory to improve the quality of CTOP services. Supportive contributions strengthening the issue of continuous assessment are made by Thapa and Neupane (2013:386) and Islam, Rahman, Halim, Errickson, Rahman and Dalai (2016:3). Advocating for the frequent assessment of continuous assessment processes, Thapa and Neupane's (2013:386) assert it will assist in identifying areas that need strengthening to address gaps in CTOP service delivery while Islam et al (2016:6) make it clear that quality improvement is a never-ending journey as it is an on-going endeavour to better services to the people in pursuit of the betterment of women's reproductive health.

Norman, Hestrin and Deuck (2014:1) report on the introduction of the toll-free pregnancy option service (POS) programme to bridge the access gap to assist vulnerable women in need of CTOP services living in rural and remote areas of Canada. According to these authors, the POS programme has proven that continuous assessment is of great significance in improving women's reproductive health for the better. The importance of focusing attention on continuous assessment of the CTOP processes is perhaps realised more fully if one considers the warning by Strefling, Lunardi Filho, Kerber, Soares, Gomes and Vargas (2013:212) that the lack of continuous assessment of the processes of CTOP services affects women's personal, family and social life while also exerting pressure on the health system due to the rise in treatment costs.

5.5.10 Clients are offered post-CTOP counselling

The Fisher's exact results (0.008) indicated a significant association in offering clients post-CTOP counselling between institutions. Post-CTOP counselling forms part of the comprehensive package of CTOP services. Counselling offers support to the CTOP client who is emotionally unstable. The results of this statement indicated compliance by all CTOP clinics; post-CTOP counselling was offered in all institutions to women after terminating a pregnancy as stipulated in the CTOP Act (1 of 2008).

5.5.11 Nursing audits are done to improve quality of CTOP services

The Fisher's exact results (0.033) from institutions showed a significant association between conducting nursing audits and improvement of quality of CTOP services. The results of this statement showed tertiary hospitals led in doing nursing audits while the other institutions were compliant. Respondents mentioned that nursing audits are an essential quality improvement tool used to meet the expectation of clients in evaluating the outcomes.

Nursing audits should be followed by feedback session involving all stakeholders rendering CTOP services to discuss the way forward. Agreeing with the aforementioned statement, a suggestion for the way forward is made by Hutchinson, Sales, Brotto and Bucknall (2015:6) who advise that important recommendations should be made following the analysis of the audit report. Establishing best practice measures are pivotal to improve quality of care identified in nursing audits. The interpretation of Flottorp, Jamtvedt, Gibis and McKee (2010:19) with regard to the value and fruitfulness of nursing audits is that such audits enhance professional performance thereby improving the quality of CTOP services and assuring client safety.

Through nursing audits the delivery of CTOP services are assessed and deficiencies which prevent excellent service delivery are identified and can be appropriately addressed (Buchmann 2014:136). With regular auditing the knowledge and skill of healthcare professionals improve and production levels increase as nurses gain insight

into the expected performance and compliance with understanding (Poortaghi, Salsali, Ebadi, Rahnavard & Maleki 2015:5).

5.5.12 Monthly meeting are held with all stakeholders

Meetings are a platform for solving problems, sharing information and teaching to improve the quality of CTOP units. Based on Fisher's exact results (0.00) which reflected a significant association between monthly meetings held with stakeholders and institutions, the CHC and district health facilities led as far as holding such meetings were concerned. Disappointingly, tertiary and central health facilities showed little effort with regard to holding meetings with all stakeholders.

Management meetings with CTOP nurses are essential for sharing information and knowledge to achieve the set goals. Management communication and commitment should focus on creating better interaction with CTOP nurses thereby improving the attitude of the staff as advised by Nielsen (2014:8).

Monthly meetings should be held with CTOP staff to evaluate progress on improvement of the quality of CTOP challenges identified (Paul, Gemzell-Danielsson, Kiggundu, Namugenyi & Klingberg-Allvin 2014:9). Minutes of the meetings need to be taken consistently for record purposes. All public health facilities should be encouraged to hold monthly meetings with all CTOP stakeholders to make sure there is uniformity in quality improvement activities.

5.5.13 Bookings are controlled to manage the clients

Fisher's exact results (0.012) showed a significant association between controlling of bookings and managing of clients within institutions. The results of this statement indicated that bookings were not controlled to manage clients.

Healthcare professionals rendering CTOP services are always striving to improve the quality of the service to satisfy clients in overcrowded clinics. The introduction of a booking system in CTOP clinics is aimed at improving client reservation (Ham, Peck, Moon & Yeom 2015:5). The purpose of a booking system is significant on a few levels. Designing a workable booking system will reduce waiting times; thus, it is an essential part of an overall effort to provide clients with the best quality of service they deserve. Mardiah and Basri (2013:26) agree with this point in the discussion and inform that effective management of client flow is a key to achieving excellence and quality in the delivery of CTOP services. Adherence to a set booking system reduces client waiting time and improves the use of human and material resources as well as making allowance for doctors to make effective use of their time (Mardiah & Basri 2013:28).

The discussion is supported by Kyambile and Kalegele (2015:21) who cite that the use of the booking system has the benefit of clients not standing in queues. On the other hand, Williams, Chambers, Dada, McLeod and Ulatowski (2014:1) report the challenge of clients not honouring their booking dates is a major challenge. To reduce waiting time and improve the quality of CTOP services, public health facilities require stringent measures to manage clients who do not honour appointments. Public health facilities strive for the betterment of quality of care and satisfaction of clients in their performance. By implementing and monitoring an effective booking system, even distribution of the workload and staff satisfaction can be achieved (Chalker, Wagner, Tomso, Johnson, Wahlström & Ross-Degnan 2013:164).

5.5.14 There is compliance to the set CTOP standards

The Fisher's exact results (0.053) indicated significant compliance to the set standards between age and the number of pregnancies response rate. The results of this statement showed all levels of pregnancy indicating there was compliance. However, the response from three pregnancies and above stated that there was no compliance to the set CTOP standards. The responses from three pregnancies and above revealed that the clients had repeatedly requested CTOP services. The researcher is of the

opinion that the clients did not use the same facility for the repeat terminations requested.

In all public health facilities, women requesting CTOP services are treated the same as stipulated in the CTOP Act (1 of 2008). Compliance to set CTOP standards is important to ensure the safety of women requesting termination of pregnancy services. According to Karen, Trueman and Magwentshu (2013:397), South Africa has the most developed government systems to manage termination of pregnancy services. The set CTOP standards remain intact and compliance was closely monitored allowing full implementation (Karen et al 2013:399). Public health facilities designated to render CTOP services in South Africa comply with the set standards.

5.5.15 Registered professional nurses and midwives display a positive attitude towards clients

Positive attitude is a prerequisite in any organisation including in public health facilities rendering CTOP services. The Fisher's exact results (0.004) indicated a significant association between the positive attitude displayed by registered professional nurses and midwives towards CTOP clients and the number of pregnancies.

Several studies have revealed the negative attitude of nurses in CTOP clinics as a barrier towards improving women's reproductive health. Lamina (2013:408) recommends value clarification training programmes to promote a positive and more tolerant attitude by nurses towards CTOP clients. Providing CTOP services are emotionally draining for healthcare professionals and therefore psychological counselling and debriefing are critical support systems they need to cope in this stressful environment. In their study, Adeyemo, Oyadiran, Ijedimma, Akinlabi and Adewale (2014:6) found that registered professional nurses' and midwives' positive attitude towards CTOP clients promoted positive outcomes.

Mannava, Durrant, Fisher, Chersich and Luchters (2015:2) emphasise that the attitude of registered professional nurses and midwives has an influence on how women

perceive CTOP services. A judgemental attitude undermines the quality of care while a supportive and understanding attitude of CTOP registered professional nurses and midwives promotes the efforts of reducing maternal mortality and morbidity and attracts client to CTOP clinics for safe CTOP and quality reproductive care delivery. The discussion is supported by Pyne (2015:13) who indicated that the attitude of CTOP registered professional nurses and midwives are important for overall CTOP service delivery.

5.6 SUMMARY OF FISHER'S EXACT RESULTS

5.6.1 CTOP structure

The Fisher's exact analysis results of evaluating association between structure and institutions, healthcare professionals, allocation, and development revealed a significant association with regard to the facility structure and delivering quality services as indicated by healthcare professionals. The CTOP rest room, nurses' tea room and nurses' station were highlighted by healthcare professionals as being significant. According to the analysed results, these areas of significance as identified have not received attention in CTOP services in public health facilities.

Equipment maintenance also emerged as important in structure. The rotation of CTOP nurses to other units was noted as an important area of the CTOP structure. The significance of CTOP services operating for 12 hours and repeat patients seen frequently are important areas for discussion under structure. The gaps identified revealed the existence of a need to revisit the CTOP services in order to develop quality improvement plans to better CTOP service delivery.

5.6.2 CTOP Processes

Assessment of the results of association between processes and institutions, healthcare professionals, allocation and development of CTOP services in public health facilities based on Fisher's exact analysis result noted the following areas of significance: display of information with regard to service times, monitoring of waiting times, and compliance to set standards. The areas highlighted as significant under processes reflect existence of gaps leading women to continue seeking illegal and unsafe methods of terminating an unwanted pregnancy.

Files with the latest CTOP information, serious adverse events and monthly meetings with stakeholders have been highlighted as significant in the processes of CTOP services. Discussions around these items should ensure the development of strategies to improve CTOP services in public health facilities.

5.6.3 CTOP outcomes

The Fisher's exact analysis results identified significant areas in the assessment of the outcomes of CTOP services between age, marital status, institutions, number of pregnancies, and number of children.

Compliance to CTOP standards, giving health education and registered professional nurses' attitude are significant in the outcomes of CTOP services in public health facilities. Counselling of clients, serious adverse events, the availability of a booking system, and monthly meetings with stakeholders are important for the outcomes of CTOP services. These areas of significance need urgent attention for the improvement of the quality of CTOP services in public health facilities.

5.7 CONCLUSION

This chapter provided an interpretation of Fisher's exact results using literature to support the findings. In this chapter the three concepts that relate to the Donabedian model of quality care, namely structure, processes and outcomes were identified and described.

The structure in public health facilities has not improved since the implementation of the CTOP services. The challenges of inadequate space which does not provide for privacy, lack of clients' rest rooms post-CTOP, inadequate equipment maintenance, and lack of ablution facilities for CTOP clients compromise the quality of care being rendered. The rotation of CTOP nurses to other units was reported as impacting negatively on the CTOP services. The lack of privacy is disadvantageous to women from relating to the healthcare professional the reproductive challenges they are facing to get comprehensive care.

The structural challenges towards rendering quality CTOP services were not obviated or even narrowed as many studies indicate that the structure still retains influence over the quality of healthcare delivery (Banerjee et al 2015:2). This statement is supported by Lindqvist et al (2015:266) who state the poor state of the infrastructure in public health facilities which has not been altered to meet the needs of women's reproductive health remains a challenge to achieving the CTOP objectives.

The study revealed some gaps in the process concept. Areas of concern raised are the monitoring of waiting times, displaying of CTOP information, compliance to set CTOP standards, the number of repeat CTOPs seen in the CTOP units, and serious adverse event. Counselling of clients, serious adverse events and the unavailability of a booking system including irregular monthly meetings with stakeholders were identified as gaps under the process concept. Nursing audits and the availability of the latest information were included in the gaps identified in the process concept.

The outcome concept identified the attitude of healthcare professional towards CTOP clients, counselling and compliance to set standards including serious adverse events as shortcomings in the delivery of quality CTOP services.

Finally, gaps still exist in CTOP services and it needs strengthening to make the CTOP services effective and efficient. The identification and management of such gaps will contribute to the betterment of CTOP services.

The next chapter will present the Delphi technique processes for developing guidelines to improve the quality of CTOP services in public health facilities.

CHAPTER 6

DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

6.1 INTRODUCTION

Phase 1 of the study focused on the assessment of the quality of the CTOP structure, determination of the quality of the CTOP processes and evaluation of the quality of the CTOP outcomes in public health facilities. Phase 2 of the study focuses on the drafting and development of guidelines to improve the quality of CTOP services in public health facilities. The modified Delphi technique method will be used to develop guidelines in this study. The process used in the development of draft guidelines is described in this chapter.

6.2 DRAFTING OF GUIDELINES TO IMPROVE THE QUALITY OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

To improve the quality of CTOP services in public health facilities, the development of guidelines is a most important step. The findings of Phase 1 of the study were used to contribute to the formulation and drafting of guidelines to improve the quality of CTOP services in public health facilities. The findings identified issues of concern with regard to structure, processes and outcomes as outlined in Donabedian's model of quality care. The aim of guideline development is to improve the quality of CTOP services in public health facilities.

The findings of Phase 1 derived from the three concepts in Donabedian's model of quality care, namely, structure, processes and outcomes as revealed in the results

formed the basis of the guideline development to improve the quality of CTOP services in public health facilities. The Phase 1 findings were translated into statements which would be used in the development of guidelines. The researcher aimed to improve the quality of CTOP services in public health facilities using the gaps identified in Phase 1 to develop guidelines.

Developing guidelines implies that structure, processes and outcomes harmonise updated knowledge with expectations of clients resulting in improved CTOP services (Nothacker et al 2016:1). Low et al (2014:2) found the absence of guidelines led to inadequate allocation of space for CTOP services in public health facilities. Guidelines are an essential part of the quality healthcare delivery process. Developed guidelines are evaluated according to accepted criteria to ensure high quality as cited by Hilbink, Ouwens, Burgers and Kooi (2014:6). In this study, guidelines development endevoured to improve the gaps identified in the structure, processes and outcomes of the CTOP services in public health facilities.

6.3 SCOPE OF THE GUIDELINES

Identifying the audience in guideline development is pivotal and is determined by the topic under study. The intent with the developed guidelines in this study was to provide recommendations for improving the care of CTOP clients in public health facilities. The guidelines need to have an impact on the content to give it the necessary influence that it should have on quality improvement (Yawn, Ald, Qaseem, Black & ComposOutcalt 2012:219).

Although the target CTOP client population for this study was limited to clients who requested CTOP services as stated in the CTOP Act (1 of 2008), the ultimate target audience that the study intends to reach are registered professional nurses and midwives in collaboration with doctors, psychologists and social workers rendering CTOP services to clients.

The experts who participated in the modified Delphi process formed part of the stakeholders. It is envisaged that the guidelines will furthermore assist policymakers during policy reviews to guide the improvement of CTOP services in public health facilities.

6.4 PURPOSE OF GUIDELINES

The purpose of guidelines in this study was to improve the quality of the structures, processes and outcomes of CTOP services in public health facilities and additionally would assist policymakers and facility managers to prioritise quality improvement of the CTOP structure, processes and outcomes in public health facilities. Guidelines are intended to improve the quality of care and increase effectiveness and client satisfaction. Kredo, Bernhardson, Machingaidze, Young, Louw and Ochodo et al (2015:122) postulate that guidelines have been important in quality health practices for decades. Therefore the researcher briefly suggested that the current guidelines should:

- provide a comprehensive strategy for designing the structure, processes and outcomes of CTOP services in public health facilities,
- define the standard of CTOP structure, processes and outcomes in public health facilities,
- improve the quality of the structure, processes and outcomes of CTOP services in public health facilities, and
- organise and deliver quality CTOP services uniformly in public health facilities

6.5 THE IMPORTANCE OF GUIDELINES IN PUBLIC HEALTH FACILITIES

Guidelines are explained by Kredo et al (2016:123) as a set of instructions for use within specific circumstances for a range of purposes. They form an important part of quality improvement processes to reduce preventable mistakes (Kredo et al 2016:123). Guidelines are useful tools for achieving changes in the current status of the CTOP structure for the provision of high quality CTOP services. Improving the quality of CTOP

services is the focus of any health establishment. In this regard, the development of guidelines will ensure consistency and uniformity in bridging the gap in the current CTOP structure, processes and outcomes. A further aim of the development of guidelines in this study was to improve women's access to CTOP services. Gagliardi, Brouwers and Bhattacharyya (2015:127) states that guidelines are foundations of efforts informing the planning and delivery of services to improve healthcare services. These authors assert that guidelines offer recommendations and serve as the basis for improving performance and outcomes.

Guidelines are statements that include recommendations to maximise patient care. The significance of guidelines lies therein that it improves the quality of patient outcomes and assures the safety of patients (Middleton et al 2015:18). To improve the quality of healthcare delivered in public health facilities, it is imperative to develop guidelines for supportive purposes because guidelines augment the appropriate use of quality improvement initiatives in health. Guidelines further assist healthcare professionals to conform to the nursing care standards in different health situations (Clark et al 2015:23).

Guidelines address challenges that are within the control of healthcare professionals. They enhance the quality of the outcomes of care rendered and assist healthcare. Guidelines assist healthcare professionals in achieving the set health objectives and standardised patient care. Healthcare professionals pursue safer methods of delivering safe patient care by developing guidelines (Ahn & Kim 2012:S60). Because guidelines need to be current and effective, it is essential to incorporate updated and the most recent research information into its development to improve the quality of patient care (Bush et al 2017:10). The use of guidelines increases patient safety and encourages consistency of best practice (Kachalia, Little, Isavoran, Crider & Smith 2014:59).

The purpose of this study was that the development of guidelines would bring solutions to the CTOP structure, processes and outcomes challenges.

The information used in development of the draft guidelines included:

- the assessment of the quality of CTOP structure in public health facilities,
- determining the quality of CTOP processes in public health facilities
- the evaluation of the quality of CTOP outcomes in public health facilities, and
- the development of draft guidelines based on the discussions from the findings of Phase 1.

6.6 PROCESS OF GUIDELINES DEVELOPMENT TO IMPROVE THE QUALITY OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

The process of guidelines development was guided by a modified version of the AGREE II Instrument (2003 & 2013) as well as a modified Delphi technique. The AGREE II Instrument is used to rate developed guidelines, however, in this study it was used to rate and develop guidelines to improve the quality of CTOP services in public health facilities. The following adapted and selected domains were used in a questionnaire guiding development: stakeholder involvement, rigour of development, relevance, sustainability, feasibility, propriety and plausibility.

- **Stakeholder involvement**

  The guidelines have a special focus on the opinions of the intended users who supplied information during data collection. The data collected from the current study participants was used to represent their opinions in the development of the guidelines. The participants were experts in the field of reproductive health including CTOP services. The CTOP clients shared their experiences and views of the CTOP services in public health facilities. The experts became involved during the modified Delphi technique when doctors, registered professional nurses and midwives, psychologists and social workers contributed to the development of the guidelines. Stakeholder involvement in guideline

development is critical in influencing successful implementation and preventing recommendation biases (Wu et al 2015:2).

- **Rigour of development**

The processes used to gather evidence in developing guidelines should be clearly outlined. Questionnaires were used to collect data from healthcare professionals and clients to determine the quality of the structure, processes and outcomes of CTOP services in public health facilities. A literature search was performed to gather current evidence to support the development of the guidelines. Experts in CTOP services participated in the modified Delphi technique processes to source out rich information to validate the development of the guidelines. Recommendations for the guidelines development were based on relevant evidence using interventions with proven benefits.

The developed guidelines should be piloted prior to implementation to evaluate their usability. The methods used to develop guidelines should yield high quality, practical and implementable guidelines for better health outcomes. Browman et al (2015:4) posit that guidelines should be built on evidence, existing knowledge and the use of rigorous methods to inform policy decisions at higher level including practice standards. It is recommended that guidelines be reviewed regularly to incorporate new knowledge in order to remain current and inform practices. A period of two to three years is proposed for guidelines review (Loveday et al 2014:S11).

- **Relevance**

Relevance refers to the significant contribution the guideline would effect on improving the CTOP services in public health facilities (Bornmann 2013:223). Guidelines are recommended instructions that determine a course of action to be followed in assisting practitioners and patients to decide on the appropriate healthcare for a given situation (Ahn & Kim 2012:S55). Guidelines should be relevant and consistent with the objectives of the programme and assist with the

improvement of the structure, processes and outcomes of the CTOP services in public health facilities. Relevance determines whether the developed guidelines apply to the current setting of the study. The involvement of CTOP clients and other stakeholders to provide relevant information about the state of CTOP services in public health facilities played a vital role in ensuring relevance of the developed guidelines to the current settings in public health facilities. The inputs from stakeholders informed the decisions to improve the quality of CTOP services in public health facilities.

- **Sustainability**

Sustainability refers to the continued efforts of integrating knowledge as shared by researchers across the field (Schoolman, Guest, Bush & Bell 2011:12). Guidelines incorporate regular reviewing to update knowledge through research findings (AGREE II 2003 & 2013:30). Regular reviews forms and ensures a standard in guideline development and ensures that new knowledge is incorporated.

In the current study the sustainability of developed guidelines was achieved by integrating new information as and when it was generated to assure the guidelines met the needs of the present situation. Whatever new knowledge was generated had to be in line with bettering the service to improve the quality of the CTOP services in public health facilities.

According to Davies et al (2011:308) regular reviews, updates and recommendations must be made. In support, Proctor, Luke, Calhoun, Brownson, McGrary & Padek (2015:12) state guideline review strengthens recommendations and sustains the effectiveness of a programme in public health facilities to improve healthcare delivery. These authors further propose for the involvement of experts to take the lead role in reviewing guidelines for continued evidence-based healthcare interventions that will impact positively on improving CTOP services in public health facilities.

- **Feasibility**

Feasibility refers to the applicability of the guidelines to the situation and the impact the interventions will have in improving the situation (Kastner et al 2015:503).The guidelines should be easy, practical and conveniently achieved. Feasibility is about the recommended interventions and determining their appropriateness and acceptability to the target group (Mueller et al 2014:170). In addition, guidelines should be realistic to achieve cooperation from the target group. To make an impact on the currents status of the challenges, developed guidelines need to be based on the data gathered as this will ensure they do indeed report on the current status of the challenges (Strath et al 2013:2272). The input of the panel of experts should add value to the guidelines and support easy and convenient achievement of intended goals on implementation. The developed guidelines should address the concerns identified in CTOP services in public health facilities to improve the quality thereof.

- **Propriety**

Propriety refers to the legal and ethical manner in which research was conducted with due regard to the welfare of those involved (Steele, Chang, Hendren, Weiser, Iran, Buie & Rafferty 2015:713). Guidelines should be ethical and be conducted within the rights of those involved. CTOP is a very sensitive issue and care should be taken to assure the protection of the rights of those involved. Researchers are expected to comply with the common rule of doing the right thing and respecting the rights of all participants (Fouka & Mantzorou 2011:4). In this regard, documented informed consent was obtained in this study to ensure there was no violation of the participants' rights. Questionnaires were used and anonymity was strictly maintained. The study received ethical approval from the University as well as the facilities involved. Fouka and Mantzorou (2011:6) emphasises that the dignity of the research participants should be protected. Maintaining ethics in research promote collaboration of work with the institutions

involved and helps build public support through the sharing of research knowledge.

- **Plausibility**

Plausibility refers to the beneficial effect or the impact of an intervention towards the intended situation (Kahn et al 2014:S190). The guidelines should be acceptable and significant for the health benefits the programme intends to have an mpact on which, in the case of the current study, would be to improve the current state of CTOP services in public health facilities. Since they are informed by the review of evidence they optimise patient care by assessing the benefits. Woolf et al (2012:1) indicate that guidelines are efforts to improve healthcare while Ahn and Kim (2012:S55) add that the significance of developing guidelines is to improve the quality of care by providing evidence-based information to inform healthcare professionals' decisions and description of interventions to be followed in a given situation.

6.7 CRITERIA USED IN GUIDELINE DEVELOPMENT

The guiding principles in guideline development require that they should meet the criteria for high quality clinical practice (AGREE II 2003 & 2013). The development of guidelines in this study included the domains listed below by addressing the gaps identified. The process followed in guideline development in this study is summarised in Table 6.1:

Table 6.1 Domains and description used in formulating criteria

NUMBER	DOMAIN	DESCRIPTION
1	Purpose and scope	The purpose was to improve the quality of CTOP services in public health facilities. The target users of the guidelines are the registered professional nurses and midwives, doctors, psychologists, social workers and CTOP clients.
2	Stakeholder involvement	The stakeholders from whom data was collected were registered professional nurses and midwives, health facility and quality managers, doctors, psychologists, social workers and CTOP clients. Experts were involved during the modified Delphi processes.
3	Rigour of development	Data was collected through a questionnaire. Questionnaires were used to collect data from participants. A literature search was performed to gather current evidence to support the guidelines development. The modified Delphi technique was engaged to source information from CTOP experts in the filed under study
4	Relevance	Guidelines were consistent with the objectives of the programme and would assist with the improvement of the structure of the CTOP services in public health facilities.
5	Sustainability	Hopefully the developed guidelines will definitely have continued long-term benefits for the programme. The vision is that the guidelines will incorporate regular reviews to update information through research findings.

NUMBER	DOMAIN	DESCRIPTION
6	Feasibility	The guidelines are easy, practical and can be conveniently achieved. The input from the panel of experts' and prospective implementers added value to the developed guidelines since they are realistic and was developed on the basis of data gathered to ensure they report on the current challenges they want to impact on.
7	Propriety	The guidelines were ethically and respectfully conducted within the rights and interests of the stakeholders involved.
8	Plausibility	Guidelines are acceptable and significant for the health benefits the programme intends to impact on. Since they were informed by review of evidence, the developed guidelines should optimise patient care by assessing all benefits.

AGREE II Instrument 2003, 2009 and 2013

6.8 METHODOLOGY OF GUIDELINE DEVELOPMENT USING THE DELPHI TECHNIQUE

The Delphi technique was used in this study. It is a method of choice to reach consensus in the development of guidelines to improve the quality of CTOP services in public health facilities. McMillan et al (2016:655) define Delphi technique as a research method used in problem solving areas. The Delphi technique is often used for developing guidelines in health, however, it can be a long process if not controlled (McMillan et al 2016:655). This technique is characterized by guaranteed anonymity of panel members while the researcher drives towards soliciting consensus. Anonymity implies that panel members are not aware who is involved except the researcher. However, in this study anonymity was not retained in the third and final round since the

panel members had to meet to defend their input towards the developed guidelines by exchanging important information and providing clarity to justify their viewpoint (Eubank, Mohtadi,Lafave,Wiley, Bois, Boorman et al 2016:3). In this study the researcher chose the closing round for the panel members to have a face-to-face deliberation session.

The Delphi technique method involves collecting the opinions or views of experts regarding a particular subject (McMillan et al 2016:661). It consists of a series of interactive processes between the researcher and the identified experts on the study topic. According to Davidson (2013:58), it is the most effective research method since it allows experts to communicate freely and express their opinions and judgements openly and honestly.

There are different types of the Delphi technique methods namely classical, modified, policy, decision, real time and e-Delphi. Each method has its own uses, advantages and disadvantages. It is a suitable method to reach experts in diverse geographic locations (Bentley, Kerr & Powell 2016:3). For the purpose of this study the modified Delphi technique approach was used which included a face-to-face round of deliberations where the experts defended their input (Davidson 2013:57). The decision made to use the modified Delphi in this study was strengthened by considering the opinion of Eubank et al (2016:2) who confirm it allows for interaction among experts to clarify their viewpoint in the final round. The researcher additionally chose the modified Delphi technique because it is a method which allows control of response time and also assures validity via face-to-face interaction between panel members. The modified Delphi method involves interaction with the panel members to solicit information regarding the topic being investigated. A common characteristic among all Delphi technique methods is the use of expert members to reach consensus as stated in Davidson (2013:57).

6.8.1 The modified Delphi technique

The modified Delphi technique is one of the variety methods used in soliciting information from experts to reach consensus and was the method of choice for this study. The modified Delphi method is used successfully in healthcare settings to determine consensus as confirmed by Eubank et al (2016:2). In this study the modified Delphi technique consisted of three rounds. One round of interviews was allowed for the experts to reach consensus through interactive collaboration. It was the researcher's decision to use the modified Delphi method to control the time for the feedback. In accordance with the modified Delphi technique, the significance of opinion took priority in the interview, hence, the panel of experts were afforded the opportunity to argued and justify their point of view individually. The panel of expert in this study comprised of homogenous members who specialised and were experts in CTOP services including women's reproductive health. The homogeneity of the panel members allowed intense discussions on the study topic thereby enhancing the reliability of the developed guidelines.

6.8.2 Panel of experts

The panel of experts comprised of well-informed, experienced and knowledgeable individuals thus bringing together their collective and diverse wisdom in a cost-effective way. Each member was purposively selected for the valuable input he or she could actively contribute towards the guidelines development. The selection of panel members who are experienced, resourceful and committed is critical to ensure the validity and reliability of a study (Giannarou & Zervas 2014:67). For the purpose of this study, a panel of healthcare professionals who were well-informed and knowledgeable with regard to CTOP services and women's reproductive health services were selected. The panel of experts were requested about their willingness to participate in the study and all members responded positively.

The number of experts used in panels of Delphi technique varies and ranges from a minimum of five (5) to a hundred (100) or more depending on the topic being investigated. Jorm (2015:891) states there is little guidance as to the number of panel of experts in Delphi studies but, according to this author, making use of a larger panel should be encouraged to create a robust engagement. On the other hand, Irdayanti, Ramlee and Abdullah (2015:17) reason that a large number of experts will make it difficult to reach consensus. These authors therefore propose the involvement of five to ten (5 - 10) experts is sufficient to reach consensus in a modified Delphi study. Giannarou and Zervas' (2014:67) contribution to this debate is that no hard and fast rules exist for determining the number of participants in a Delphi study and therefore Delphi panels do differ in member numbers.

In the current study a group of ten (10) experts based on the selection criteria was invited to participate. The invitation for participation was based on the selection criteria. Of the ten (10) experts invited only six (6) responded positively. The six members who constituted the panel of experts comprised of doctors, nurse managers, operational managers and registered professional nurses and midwives who were all working in CTOP and reproductive health services at the time of study. The researcher selected the panel members based on their commitment, experience and knowledge of working with CTOP and women's reproductive health services. She was satisfied that the homogeneous panel of six experts would produce good results. The researcher selected the panel members based on their commitment, experience and knowledge of working with CTOP and women's reproductive health services.

The six participating expert panel members were all from public health facilities in the Tshwane district. Each one was contacted individually via telephone from the public health facility they worked in. All six panel members were known to the researcher. The modified Delphi process was conducted via emails sent separately to each expert. The third and final round was a face-to-face interview round which followed later.

The sample in this study was homogeneous since all experts worked with the CTOP clients in women's reproductive health clinics at the time the study was done. Two

rounds of emails were used followed by a final face-to-face interactive round. In Table 6.2 below a descriptive summary of the expert panel members who were involved in the development of guidelines to improve the quality of the CTOP services in public health facilities is provided.

Table 6:2 Descriptive summary of the panel of experts working in CTOP facilities

NO	AGE	GENDER	PLACE OF EMPLOYMENT	POSITION	PROFESSIONAL QUALIFICATIONS	EXPERIENCE
1	58	Male	Hospital	Head of CTOP unit Gynaecology doctor	MBCHB Durban University	7 years
2	45	Female	Hospital	Gynaecology Consultant	MBCHB Sefako Makgatho Health Sciences University (Formerly known as Medunsa)	5 years
3	48	Male	Hospital	Head of Obstetric unit	MBCHB Durban University	10 years
4	54	Female	Hospital	Area manager	Advance midwife	9 years
5	60	Female	Hospital	Op/manager CTOP	Advance midwife	13 years
6	43	Female	Hospital	P/nurse in CTOP	Advance midwife	5 years

6.8.3 Consensus

In the modified Delphi technique method, a pivotal issue is that consensus must be reached through systematic gathering of information from experts in the field under study. Jorm (2015:888) points out that the modified Delphi technique method is

dependent on the experts' expertise to arrive at consensus through the exchange of arguments which are based on facts. Reaching consensus indicates maturity and respect for each panel expert member's knowledge contribution (Sobaih, Ritchie & Jones 2012:887). Consensus can be reached at any level depending on the complexity of the topic under study. Bentley et al (2016:5) remark that there are no guidelines as to what constitutes consensus in modified Delphi studies. However, different opinions of researchers exist regarding reaching consensus. To mention a few, these opinions range from the percentage of participants who come to agreement to reaching a unanimous decision or for certain responses to fall within a prescribed range (Nworie 2011:26). Conversely, knowledge, suggestions and speculation are among the few resources used to reach consensus in a modified Delphi study (Irdayanti et al 2015:15). In the current study the level of experts' agreement was used to reach consensus.

6.8.4 Number of rounds

Using the modified Delphi technique in this study, consensus was reached after three dedicated rounds. Depending on the complexity of the topic under study, consensus is usually reached within the three rounds. The first two rounds can be workshops or online survey; however one of the rounds should be a face-to-face interview (Eubank et al 2016:2). For the purpose of this study emails and interviews were used. The panel of experts were interviewed in the last round in a face-to-face contact session.

6.8.5 Modified Delphi round one

The researcher invited the panel of experts telephonically to participate in the development and refinement of the guidelines to improve the quality of CTOP services in public health facilities. Consent was obtained through the experts' indication that they were willing to participate. The experts were emailed a list of statements to familiarise themselves with the content thereof.

During the first round the guidelines were circulated to experts via email to collect data in the form of comments and input from them on the statements regarding improving the quality of CTOP services in public health facilities. The email was accompanied by a clear explanation of the study process and objectives. It further included instructions on how the experts were expected to participate (refer to Annexure D). The experts were requested to respond by marking one of each of the following verb phrases which they believed to be appropriate: “Agree”; “Strongly agree”: “Disagree” or “Strongly disagree”. A further request was for each expert to unpack the guidelines as she or he deemed necessary to ensure guidelines of a high standard guidelines would be developed. A section for “Comments” was included and the experts were invited to write their comments.

Responses as comments from the experts were received. Those responses were analysed and their input added as suggested. The experts agreed that the guidelines were of value; however, they expressed great concern about the exclusion of other role players in the CTOP services to add weight to the development of the guidelines. A list of revised guidelines was refined and adjusted following the opinions and input made by the panel of experts in the first round. Corrections were made and input added as suggested by the experts. Their input was accepted and used to modify the guidelines. The modified guidelines were then presented in the second round.

6.8.6 Modified Delphi round two

The experts were contacted by email informing them of the second round as per their comments and input towards the drafted guidelines. The modified guidelines were emailed to the experts. They were requested to review their responses again after it had been adjusted in accordance with the comments received from the first round. One again, the experts were invited to add comments to the modified questionnaire. The second, modified questionnaires were returned to the researcher with no added comments thus confirming all experts were satisfied with their input and comments from round one considered and added. The modified drafted guidelines were accepted and

preparations made for the third face-to-face interaction round with the the panel of experts.

6.8.7 Modified Delphi round three

Since all expert panel members indicated satisfaction with the process and no more comments were made, the researcher arranged for a face-to-face round of deliberation to close the modified Delphi process. The face-to-face round allows for experts' interaction to provide clarification and justification of viewpoints (Eubank et al 2016:2). A date was set and a venue organised. Experts who completed the first and second round participated in the third round of deliberations. During the deliberation session experts confirmed and justified their responses. Consensus was reached during the third round with one hundred per cent (100%) agreeing to the developed guidelines as amended with their opinions and input. The deliberation session lasted for six hours. The researcher and experts explored and finalised the purpose and scope, stakeholder involvement, rigour of development, relevance, sustainability, feasibility, propriety and plausibility of the developed guidelines.

6.9 DEVELOPED GUIDELINES FOR IMPROVEMENT OF THE QUALITY OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES WITH THE INPUT OF THE PANEL OF EXPERTS

6.9.1Title of the guidelines

It was decided the tittle of the guidelines would be, 'Guidelines for the improvement of the quality of CTOP services in public health facilities'. The title was derived from the study topic.

6.9.1.1 Scope of guidelines

The scope of the guidelines focused on improving the quality of CTOP services in public health facilities. The target population comprised of registered professional nurses and midwives, doctors, psychologists and social workers. The developed guidelines have to be applicable to the current needs and objectives of a specific programme under study (Fong de los Santos et al 2015:38). The guidelines focused on the structure, processes and outcomes of CTOP services in public health facilities.

6.9.1.2 Purpose of guidelines

Purpose of guidelines is to set a general plan of action used to guide desired outcomes. Guidelines have shown to reduce harm to patients by improving the quality of care. In this study the purpose of developing guidelines was to improve the quality of CTOP services in public health facilities (Yawn et al (2012:221). Kredo et al (2016:123) cited that guidelines are developed to improve effectiveness and quality of care in support of best practices. Guidelines provide standardised uniform practices in management of CTOP services.

Guideline1: Registered professional nurses and midwives, doctors and other healthcare professionals should motivate for the renovation of the CTOP structure in public health facilities to improve the quality of care rendered.

Rationale for the implementation of the guideline

In public health facilities the CTOP units are structurally isolated, inadequate and non-therapeutic environments. From 1996 when the South African Government passed the CTOP Act (92 of 1996) and its implementation in 1997 to “improve the health of women and prevent deaths among women” as well as to promote respect for “the rights of women to choice and to bodily integrity” (Mhlanga 2003:115-6), almost no attention has

been paid to ensure proper structure in the health system to meet the needs of women who make use of CTOP service.

Currently, the CTOP structure compromises female clients' dignity in many ways. Structurally, no provision has been made in the environment for rest rooms where women can rest after procuring CTOP services neither does it have ablution facilities for women to attend to their personal hygiene before discharge. The inadequate infrastructure undermines all efforts to improve access to CTOP services. In the opinion of Vlassoff et al (2014:63) the improvement of the infrastructure holds priority in improving the CTOP services in public health facilities. Lassi, Musavi, Maliqi, Mansoor, de Francisco, Toure et al (2016:18 of 20) state stakeholders should work as a team to construct a CTOP model to meet the health needs of each country.

The activities recommended by registered professionals, midwives and other healthcare professionals to improve the structure of CTOP services in public health facilities are to:

- initiate the writing of a report on the structural challenges of the CTOP services in public health facilities as a motivation tool advocating for renovation;
- involve the provincial government in reviewing the CTOP structure in public health facilities;
- accommodate improvement of the CTOP structure in the facility budget;
- ensure there is adequate space to improve privacy for clients;
- ensure there are rest rooms for clients to recover and be observed by the CTOP nurses after termination of pregnancy;
- provide ablution facilities in close vicinity of the CTOP unit for clients to relieve themselves and attend to their personal hygiene before discharged;
- provide tea room for the nurses as a break away area; and
- provide nurse's station to ensure proper control over the flow of clients in the unit.

Guideline 2: Registered professional nurses and midwives, doctors and other healthcare professionals should ensure the provision of privacy in CTOP services in public health facilities to allow women to discuss reproductive health matters freely.

Rationale for the implementation of the guideline

Privacy in CTOP service delivery is critical and should, in fact, be non-negotiable. Providing a safe, supportive healthcare environment encompasses protecting CTOP clients' right to freedom from public observation or other disturbances. The provision of privacy confirms respect for CTOP clients from the facility's point of view and assists nurses to have a caring attitude towards the emotional status of a woman who legally wants to terminate her pregnancy. However, in public health facilities privacy is compromised due to various infrastructural challenges (Nguyễni et al 2007:175).

Privacy in reproductive health service is a right and needs to be afforded all women despite the challenges faced by the CTOP services in public health facilities. The current status of CTOP services is substandard and miserably inadequate since it does not considerate women's needs. The International Conference on Population Development (ICPD) held in Cairo in 1994, recognised privacy as one of the key components of a woman's right to reproductive and sexual health. Gazi et al (2014:9 of 10) assert public health facilities and clinics must take responsibility and ensure adequate privacy because it would encourage women to make use of legal, safe termination of pregnancy services in those specific facilities. According to Yakong et al (2010:2437) to improve women's health structural changes must be made to CTOP clinics in public health facilities to address privacy challenges. At the moment CTOP clients' privacy is tangibly invaded; it is therefore critical for health facilities and clinics to take immediate steps and make a concerted effort to guarantee women who visit CTOP units in public health facilities and clinics their privacy (Cook & Erdman 2009:86).

The activities recommended by registered professionals, midwives and other healthcare professionals to improve privacy in CTOP service delivery in public health facilities are to:

- advocate for women to be afforded privacy when consulting in the CTOP clinic in public health facilities;
- participate in the structural renovations of the CTOP clinic in public health facilities by giving input to ensure privacy is incorporated in the renovation plan.
- maintain privacy during the CTOP processes to allow the woman time to heal emotionally as well as physically post-CTOP; and
- ensure nurses keep voices down when discussing women's reproductive health issues.

Guideline 3: Registered professional nurses and midwives, doctors and other healthcare professionals should facilitate the review of the set CTOP standards in public health facilities to improve the CTOP processes

Rationale for the implementation of the guideline

Since the implementation of the CTOP Act (1 of 2008) there have been a number of developments around CTOP service delivery. The CTOP standards needed to be reviewed so that new knowledge that has been emerging in research could be included or added to improve CTOP services. A further need expressed was to respond to the challenges faced by CTOP services by reviewing the set standards. A review of CTOP standards would help to assure the safety of women who choose a CTOP as well as reduce the morbidity and mortality rate. Team members participating in the review of CTOP standards should have extensive knowledge, experience of and expertise in CTOP service delivery. A review of the set CTOP standards will be welcomed after data on clients' and nurses' experiences as well as data collected in research reports have been analysed to render the CTOP programme more user-friendly (Agbassi et al

2014:1341). The high rate of second trimester termination of pregnancy requests should assist policymakers to review the set CTOP standards (Melese et al 2017:11,&13). Rebouchè (2016:777) also proposes doing a review to demonstrate progress made and what, if any, the response is to women's health rights and CTOP delivery. A review of CTOP standards should improve the CTOP services based on the worth of evidence collected through research findings from the time of the inception of CTOP in the late nineties till the present day.

The activities recommended by registered professionals, midwives and other healthcare professionals to improve the review of the set CTOP standards in public health facilities to improve the CTOP processes include the following:

- to make sure public health facilities adhere to the same practice standard when rendering CTOP services;
- to develop standard operating procedures to maximise the implementation of CTOP standards across the public health facilities;
- to standardise CTOP practices across all public health facilities;
- to ensure public health facilities comply to the set standards of CTOP practice; and
- to audit the set standards to identify gaps and develop strategies to improve the service.

Guideline 4: Registered professional nurses and midwives, doctors and other healthcare professionals should ascertain comprehensive CTOP care by supporting and encouraging continuous counselling of CTOP clients before CTOP services and reinforcing teaching after initiation of CTOP services

Rationale for the implementation of the guideline

Counselling plays an important role in assisting women to make an informed decision with sufficient information received. Supportive counselling focuses on assisting women with an unwanted pregnancy to decide on the outcome of the situation they find themselves in. During counselling sessions contraception must be addressed in a sensible and sensitive manner for women to buy-in. Hoggart (2015:4) raises a critical point in the discussion by stating counselling is central to women's reproductive health choices as well as being a beneficial pre- and post-termination of pregnancy procedure. Counselling guides a woman to cope with the emotional aspect of the unwanted pregnancy and assists her to make an informed decision based on her own judgement of her own individual life situation. Women are encouraged and supported during counselling to ensure no hasty decisions are made (Strydom & Humpel 2009:210-211).

The activities recommended by registered professionals, midwives and other healthcare professionals to improve support and encourage continuous counselling and reinforcing teaching after initiation of CTOP services include:

- counselling should be done by a qualified professional;
- offering pre and post termination of pregnancy counselling to all women;
- ensuring the availability of psychologists and social workers to assist clients at all times; and
- encouraging the use of contraceptives during counselling.

Guideline 5: Registered professional nurses and midwives, doctors and other healthcare professionals should continuously educate CTOP clients on reproductive health issues to raise awareness

Rationale for the implementation of the guideline

Although unwanted pregnancies affect the health and well-being of many women, it is especially female youths that most affected. Women around the world continue to be vulnerable to an unwanted pregnancy due to a dire lack of knowledge. Being uninformed and lacking the necessary knowledge on pregnancy prevention places them at risk of morbidity and mortality related to unsafe termination of pregnancy methods. To achieve the capacity to understand their sexuality in terms of reproduction and acquire knowledge to manage their sexual behaviour, young women need to be exposed to continuous reproductive education. Lyu, Wu, Cai and Guan (2016:2291) view the promotion of health education as crucial for improving clients' understanding of health outcomes. Borkar et al (2015:484-5) state educating clients on sexual and reproductive health assists them with developing the capacity to understand and acquire the skill to responsibly base their sexuality- and reproductive decision making on. Mhlanga (2003:117) strongly advocates for the education of women by means of providing them with information regarding the many options available on preventing an unwanted pregnancy.

The activities recommended by registered professionals, midwives and other healthcare professionals to improve continuous education for CTOP clients on reproductive health issues to raise awareness include:

- giving continuous health education on reproductive health issues to all CTOP clients;
- attending reproductive health workshops to update knowledge on the latest available information on reproductive health;
- focusing on preventive measures by providing health education;
- giving contraceptives to all women when initiating CTOP and reproductive health;
- strengthening the importance of contraceptive use for sexual active teenagers; and
- encouraging behavioural change towards reproductive health.

Guideline 6: Registered professional nurses and midwives, doctors and other healthcare professionals should design a tool to continuously monitor and evaluate the outcomes of CTOP services in public health facilities to reduce repeat CTOP requests

Rationale for the implementation of the guideline

The CTOP outcomes measure the effectiveness of the CTOP programme with regard to improving the health of women. A reduction in the number of serious adverse events signifies that the CTOP programme is effective. Unfortunately, the number of repeat CTOP requests shows a rapid increase. This indicates a gap exists in the current reproductive health system. Urgent and decisive steps need to be taken to address this challenging phenomenon – CTOP services are not meant to replace the use of contraceptives. The CTOP Act (92 of 1996) has a preamble, unequivocally stating "it would and should not be used as a method of contraception" (Mhlanga 2003:117). Nonetheless, women requesting repeat CTOP is a major challenge for the health system.

The stance of Cohen (2007:8) on this issue is that repeat termination requests should start with the reduction of unintended pregnancies. Samuel et al (2016:67) is of the opinion that repeat CTOPs is due to poor access to contraceptive services and proposes the use of long-acting reversible contraception as the solution. The development of a tool which can be used efficiently to monitor and evaluate the outcomes of CTOP services in public health facilities to reduce repeat CTOP requests is supported by Gambito et al (2015:4). Considering that women who request repeat termination of a pregnancy usually moves from one clinic to another, the development of such a tool will assist in capturing this so-called 'clinic hopping'. The tool will assist in monitoring the trend of repeat CTOPs in order to improve outcomes of CTOP services.

The activities recommended by registered professionals, midwives and other healthcare professionals to improve continuous monitoring and evaluation of the outcomes of

CTOP services in public health facilities to reduce repeat CTOP requests include the following:

- to design a monitoring tool to evaluate CTOP outcomes;
- to monitor repeat CTOP clients closely across all public health facilities;
- to give counselling and health education to repeat CTOP clients,
- to refer repeat CTOP clients for psychological counselling, and
- to incorporate social workers' services to assist with repeat CTOP clients.

6.10 RIGOUR AND VALIDITY OF GUIDELINES

The guidelines in this study aim to improve the quality of the CTOP services in public health facilities. Data was collected by means of a survey conducted with healthcare professionals and clients in Phase 1 of the study. The data gathered was analysed by an experienced statistician. A panel of experts was employed and the modified Delphi technique method used to source out information about the topic under study. The panel was homogenous since all members worked in CTOP and reproductive health services in public health facilities. The recommendations and input from the experts added significant meaning and value to the drafted guidelines. The domains in AGREE II (AGREE 2003- 2009 & 2013:10) were used to assess the process of guidelines development. Wu et al (2015:5) cite the importance of regular assessment of guidelines to ensure quality and rigour in developed guidelines. The panel of experts who participated in the guideline development process further assured the validity of the guidelines.

To validate guidelines it is imperative that continuous literature searches are done to monitor and assess new evidence. Updating scientific knowledge is essential since scientific evidence-based knowledge goes through constant change. The use of the AGREE II instrument was recommended because it contributed to the quality of guideline development and established validity. Radwan et al (2007:2) confirm that

guidelines should be evidence-based and be generalisable to the population to ensure validity.

6.11 UPDATING OF GUIDELINES

The shift in healthcare from a provider- to a client-orientated service means that quality, safety and effective client care have become the focal point of the healthcare system. Globalisation, technology, and the increased access to information force standards for quality healthcare delivery and management to constantly evaluate and improve their service delivery systems in order to understand and meet consumer demand and clients' unique healthcare needs.

In view of the above, regular and constant reviews of CTOP guidelines are imperative to ensure they are in line with current evidence-based trends, developments, regulations and educational activities relating to CTOP service delivery. As new research evidence continuously becomes available, guidelines continuously become out-dated which might impact on their validity. In this regard, Gurgel (2015:488) affirms that the updating of guidelines is a way of ensuring that recommendations are constantly maintained. Using new research information to update guidelines is the only way to ensure guidelines remain credible.

Agbassi et al (2014:1335) encourage the updating of guidelines to be reflective of the current clinical literature but without compromising the existing guidelines. Guidelines should be developed while bearing in mind that any updating thereof have to assent to the same criteria used when the guidelines were developed. Updating ensures that consensus remains constant with current developments in health (Eubank et al 2016:12).

Preliminary guidelines to improve the quality of CTOP services in public health facilities were developed by the researcher and refined by experts in the field of CTOP services. Guidelines should be evaluated against the criteria for quality clinical practice before dissemination and implementation to ensure reliability. The criteria to be used in

evaluating guidelines include: rigour of development, relevance, sustainability, feasibility, propriety and plausibility. Guidelines should be reviewed within every three to five years. However, the researcher recommends for the guidelines developed in this study to be reviewed after three years. This recommendation of the researcher regarding the review of guidelines is supported by Becker et al (2014) who maintain that the updating of guidelines should be done every two to three years.

6.12 CONCLUSION

In this chapter, Phase 2 of the study was described in detail. The process of developing guidelines to improve the quality of CTOP services in public health facilities was described. A set of six guidelines was developed from the quantitative findings and literature search with their subheadings outlined. The guidelines are recommended for implementation by CTOP registered professional nurses and midwives, doctors, psychologists and social workers and supported by the provincial department of health. The modified Delphi process used to refine the guidelines was explained.

In the last chapter, Chapter 7, a review of the guidelines is presented. Attention is paid to the limitations of the study. Conclusions and recommendations drawn from the study are submitted.

CHAPTER 7

SUMMARY OF THE FINDINGS, DESCRIPTION OF GUIDELINES, IMPLICATIONS, RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

7.1 INTRODUCTION

In this chapter the guidelines, strengths, implications, limitations, recommendations and conclusion of the study are presented. The purpose of this study was to develop guidelines to improve the quality of CTOP services in public health facilities in the Tshwane district using the Donabedian model of quality care. The study was conducted in two phases to address three research objectives. The three concepts in the Donabedian model of quality care, namely structure, processes and outcomes guided the study. Phase 1 of the study focused on determining the current state of the quality of CTOP services in public health facilities in the Tshwane district using the Donabedian model of quality care. Phase 2 focused on the development of guidelines to improve the quality of CTOP services in public health facilities.

7.2 OVERVIEW AND SUMMARY OF FINDINGS

Phase 1 of the study focused on determining the current state of the quality of CTOP services in public health facilities in the Tshwane district using the Donabedian model of quality care.

7.2.1 Phase 1: empirical phase

The findings of the study were presented and discussed according to the three Donabedian model of quality care namely: structure, processes and outcomes. The structural challenges of CTOP services in public health facilities are critical as it emerged from the findings. Lack of privacy due to inadequate space, lack of rest rooms after the pregnancy has been terminated, lack of ablution facilities and inadequate equipment maintenance were highlighted as compromising the quality of care rendered. From the process concept the highlighted areas of concern were monitoring of waiting times, displaying of CTOP information, compliance to set CTOP standards and the high number of repeat CTOP requests. Counselling of clients, availability of booking system including monthly meetings with stakeholders were identified as gaps hindering progress of the process concept.

The outcomes concept reported the negative attitude of healthcare professionals towards CTOP clients and serious adverse events as areas of concern to be looked into. The CTOP services need to be improved to ensure efficient and effective services are rendered.

Objective 1

To assess the quality of the structure of the CTOP services in public health facilities

Information from this objective was derived from the quantitative non-experimental cross-sectional survey research findings. Participants reported inadequate space, poor ventilation, lack of air-conditioning system, nurses' station and tea room break-away areas, lack of abbllution facilities and rest rooms. The CTOP clinic was described as uninviting and maintance of equipment not prioritised, shortage of staff and lack of

support from management. The structure of the CTOP services in public health facilities was identified as inadequate to deliver quality CTOP services.

The inadequate space in the CTOP clinics renders it difficult to provide privacy which is a right that should be enjoyed by all women in the CTOP clinic. The poor ventilation and unavailability of air-cinditioner to ensure ventilation poses a risk of spread of airborne infection. Controlling patient flow is a challenge due to lack of a nurses' station from where clients flow can be managed. The CTOP structure has no provision of a break-away area for nurses to have tea and lunch breaks.

The lack of ablution facilities compromises the quality of care rendered to CTOP clients. Clients are not observed fully however, discharged prematurely after terminating a pregnancy due to unavailability of rest rooms. The CTOP area is described as uninviting to promote that feminist welcome. Maintenance of equipment is not prioritised to meet the clients' needs. Shortage of staff remains a challenge as nurses' stretch to service many clients requesting CTOP services.

Lack of support from management to resolve the challenges experienced renders the CTOP unit difficult to manage. The inability of management to attend meetings to assist in resolving the challenges experienced by CTOP nurses makes the situation difficult. These findings are suggestive that the CTOP structure needs to be renovated in order to meet the needs of clients. Thus the development of guidelines is aimed at assisting the improvement of the CTOP structure in public health facilities to enhance the quality of care.

Objective 2

To determine the quality of the processes used in CTOP services in public health facilities

Determining the quality of CTOP processes was necessary in order to review the standards to meet the current needs of CTOP clients. This step would assist to look into the challenge of repeat CTOP requests, displaying of information, attitude of healthcare professionals towards CTOP clients, waiting time, referral system, second trimester including high risk clients' termination of pregnancy and clients not honouring review date. Clients repeating CTOP request indicate a serious gap in the family planning services. Women should be encouraged to prevent an unwanted pregnancy by using contraceptives.

Displaying of CTOP information regarding CTOP processes need strengthening to ensure clients are well informed about the service rendered in order to manage their reproductive health well. The attitude of healthcare professionals towards CTOP clients is still raised as critical in determining the use of the service by clients. Healthcare professionals' attitude towards clients should be addressed to ensure clients do not fear to access the CTOP clinic.

Waiting time in CTOP clinics should be monitored since it is a quality service indicator. Monitoring of waiting times improves the CTOP service and satisfies clients. The referal system needs to be reviewed to give clear direction to be followed. The challenge of second trimester including high risk CTOP clients requesting termination of pregnancy requires to be addressed through policy. CTOP clients should be told the importance of a honouring a review date to clear their health status. The developed guidelines are aimed at addressing the identified gaps and improve the CTOP services in public health facilities.

Objective 3

To evaluate the quality of the outcomes of CTOP services in public health facilities.

The challenges experienced by CTOP clients about unbearable post termination of pregnancy pain, heavy bleeding and minor side effects such as nausea, headache, vomiting and dizziness were highlighted. The research findings indicated that termination of pregnancy should not be a painful experience. The protocol of pain management should be revised to ensure a stronger analgesic is given to the clients to manage pain.The heavy bleeding reported by some clients should be closely monitored and medical assistance sort immediately. In a successful termination of pregnancy clients should experience moderate bleeding.

Post termination of pregnancy clients should be encouraged to rest for minor side effects such as mentioned above to subside. The strategies to overcome the challenges experienced by CTOP clients post termination of pregnancy are incorporated in the developed guidelines.

To achieve the objectives, the study employed a quantitative non-experimental cross-sectional survey design. The theoretical framework in this study was the Donabedian model of quality care. The research paradigm used was positivism which enabled the reaseacher to understand the underlying causes of the phenomenon under study.

7.2.2 PHASE 2 Guidelines development

Phase 2 of the study focused on the development of guidelines to improve the quality of CTOP services in public health facilities. The information obtained in chapter 4 of phase 1 of the study was used as the basis to develop guidelines to improve the quality of CTOP services in public health facilities. Modified Delphi method was engaged to

source out rich information from the experts in developing guidelines. Purposive sampling method was used to sample the expert to participate in the modified Delphi method based on their rich background and knowledge of CTOP services.

7.3 DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF THE CHOICE ON TERMINATION OF PREGNANCY SERVICES IN PUBLIC HEALTH FACILITIES

AGREE II (2003-2013:4) states that guideline developers should follow a structured and rigorous methodology to ensure their guidelines are sound. In chapter 6 of the study, the research findings and extensive literature review conducted were integrated to develop guidelines. The development of guidelines was necessary to improve the quality of CTOP services in public health facilities as revealed by the challenges encountered in the findings. Hunter, Leach, Baun and Bensoussan (2017:2) support guidelines development stating it will inform rational approach to CTOP service management thus reduce unnecessary variations.

The following adapted and selected domains were used in the process of guidelines development in this study: stakeholder involvement, rigour of development, relevance, sustainability, feasibility, propriety and plausibility. Each of these domains was discussed to ensure the guidelines developed meet the requirements and are of good quality.

7.3.1 Methodology of guideline development

The research findings in chapter 4 were intergrated to form concluding statements that were used to develop guidelines. A three round modified Delphi technique method was used to reach consensus in the development of guidelines aimed at improving the quality of CTOP services in public health faciliites. A panel of well-informed, experienced and knowledgeable experts' participated in this study contributing high level information which led to the successful development of the guidelines to improve

the quality of CTOP services in public health facilities. The inputs from the experts were incorporated in finalising guidelines.

7.3.1.1 Stakeholder involvement

Stakeholder involvement was critical in ensuring that the relevant groups including CTOP clients were represented in the development of guidelines as well as the roles of each stakeholder to render the developed guideline valid (Wu et al 2015:3). Guidelines that represented the views of the groups involved were acceptable and easy to implement. Yasar, Kahveci, Artantas, Baser & Cihan et al (2016:7) supports stakeholder involvement and stated that it ensured that their views were taken into consideration thus improving acceptability and applicability.

7.3.1.2 Rigour of development

An important domain in ensuring that integrity in the process of developing guidelines was followed. The statistician used Cronbach's alpha in evaluating the assessment of the questionnaires to ensure rigour and accuracy to the interpretation of the research results (Tavakol & Dennick 2011:54). Guidelines require regular updating with existing knowledge to remain valid. The recommendations should be based on current credible relevant scientific evidence (Ernstzen, Louw & Hillier 2017:8). Continuous research is necessary since it adds value by improving the information that is currently used.

7.3.1.3 Relevance

Relevance addresses the applicability of guidelines to the study setting. The domain relevance is critical and relates to the usefulness of the recommendations to the population and setting of interest (Berger, Martin, Husereau, Worley & Allen et al 2014:148). The guidelines in this study focus on improving the structure, processes and

outcomes of the CTOP services. The guidelines will inform policy makers and managers of the challenges encountered in public health facilities' CTOP units and the need to improve. The recommendations in the guidelines will benefit the population of interest and effect change to the current situation. The guidelines are relevant thus implementation will be easy since the focus is to improve the current state of CTOP services.

7.3.1.4 Sustainability

Sustainability is an important domain in guidelines development since it ensures that the developed guidelines are regularly updated with evidence-based knowledge for effective CTOP practices. The impact of the implemented guidelines needs to be sustained through new knowledge obtained from research to improve the quality of CTOP services (Proctor et al 2015:11). Guidelines have to improve the quality of CTOP services and increase efficiency and effectiveness of services by remaining current with information through regular updating. Literature search should be conducted regularly to update the guidelines with new knowledge and ensure they stay current responding to the current CTOP needs.

7.3.1.5 Feasibility

Feasibility refers to the convenience, acceptability and applicability of the guidelines to the current setting (Eldridge, Lancaster, Campbell, Thabane, Hopewell, Coleman & Bond 2016:8). The developed guidelines when implemented are expected to improve the quality of CTOP services in public health facilities. The guidelines have the potential to improve the challenges experienced in the CTOP clinic since they address all aspects of the CTOP services in public health facilities.

7.3.1.6 Propriety

The research was conducted in a legal and ethical manner. The ethics approval was granted by the University of Pretoria, Nursing department. Permission was sort from all participating institutions.The safety and welfare of those involved and affected by the research remains a cause for concern that researchers should guard against. Stakeholders were consulted to gain understanding of the processes and outcomes. Obtaining a conset is critical in preventing harm to human rights and dignity (Patel 2013:2-5). The rights of the population under study and their safety were protected throughout the study. There was absolute respect and maintenance of the dignity of the study population.

7.3.1.7 Plausibility

The developed guidelines are intended to improve the quality of CTOP services in public health facilities. The guidelines are specific to CTOP services ensuring easy implementation in order to achieve the set goals. Tsigkos, Mariz, Llinares, Fregonese, Aarum, Frauke, Westernmark and Sepodes (2014:5) state that guidelines should be specific to the CTOP program and clients to enhance the quality thereof and outcomes. Guidelines require to be updated as and when new knowledge is discovered to be valid and to meet the needs of the health service it intends to improve.

7.4 DESCRIPTION OF GUIDELINES TO IMPROVE THE QUALITY OF CTOP SERVICES IN PUBLIC HEALTH FACILITIES

It was necessary to develop guidelines to improve the quality of CTOP services in public health facilities to inform the policy makers and managers of the challenges encountered. The guidelines are relevant and specific to address the challenges experienced in CTOP services in public health facilities. The guidelines were developed with review in mind to ensure they remain current and sustainable with new information.

They are intended to improve the current status of CTOP services in public health facilities. The guidelines were developed within the rights of those involved maintaining respect and dignity.The guidelines will be presented according to the following headings:

- Title of guidelines
- Aim of guidelines
- The scope of guidelines
- Developed guidelines
- Trustworthiness of guidelines
- Review of guidelines

7.4.1 Title of the guidelines

It was decided the tittle of the guidelines would be, ‘Guidelines for the improvement of the quality of CTOP services in public health facilities’. The title was derived from the study topic.

7.4.2 Aim of guidelines

The aim of the guidelines is to set a general plan of action used to guide desired outcomes. Guidelines have shown to reduce harm to patients by improving the quality of care. In this study the purpose of developing guidelines was to improve the quality of CTOP services in public health facilities (Yawn et al 2012:221). In the view of Kredo et al (2016:123), guidelines are developed to improve the effectiveness and quality of care in support of best practices. Guidelines provide standardised uniform practices in management of CTOP services.

7.4.3 Scope of guidelines

The scope of the guidelines focused on improving the quality of CTOP services in public health facilities. The target population as users comprises of registered professional nurses and midwives, doctors, psychologists and social workers. The developed guidelines have to be applicable to the current needs and objectives of a specific programme under study (Fong de los Santos et al 2015:38). The guidelines focused on the structure, processes and outcomes of CTOP services in public health facilities.

7.4.4 Developed guidelines

Table 7.1 present the developed guidelines to improve the quality of CTOP services in public health facilities.

Table 7.1 Guidelines to improve the quality of CTOP services in public health services

GUIDELINES	RATIONALE FOR THE IMPLEMENTATION OF GUIDELINES
1. Registered professional nurses, midwives and other healthcare professionals should motivate for the renovation of the CTOP structure in public health facilities to improve the quality of care rendered	The CTOP structure in public health facilities is an isolated inadequate environment which is not therapeutic. The CTOP structure has no rest rooms to allow the woman to rest after procuring CTOP services. The CTOP environment does not have ablution facilities for women to attend to their personal hygiene before discharge. The current CTOP structure compromises the woman's dignity in many ways. From inception there was no proper structure to meet the needs of women.

GUIDELINES	RATIONALE FOR THE IMPLEMENTATION OF GUIDELINES
2. Registered professional nurses, midwives and other healthcare professionals should ensure the provision of privacy in CTOP services in public health facilities to allow women to discuss reproductive health matters freely.	Privacy with regard to CTOP services is very critical however in public health facilities it is compromised due to infrastructural challenges. Provision of privacy indicates respect and a caring attitude towards the emotional status of a woman in a CTOP clinic. Privacy in reproductive health service is a right that should be afforded all women despite the challenges facing the clinic.
3. Registered professional nurses, midwives and other healthcare professionals must facilitate the review of the set CTOP standards in public health facilities to improve the CTOP processes	Since implementation there have been a number of developments around the CTOP services. The CTOP standards need to be reviewed to add new knowledge that has been discovered through research to improve the CTOP service. There is a need also to respond to the challenges that are facing CTOP services by reviewing the set standards. Review of CTOP standards will ensure the safety of women and reduce the morbidity and mortality rate.
4. Registered professional nurses, midwives and other healthcare professionals must ascertain comprehensive CTOP care by supporting and encouraging continuous counselling of CTOP clients before CTOP services and reinforce teaching after initiation of CTOP services	Counselling plays an important role in assisting women to make an informed decision with sufficient information received. Counselling should focus on assisting women to decide on the outcome of the unwanted pregnancy situations they find themselves in. Counselling should be used to discuss contraception sensitively to get a buy in from women..

GUIDELINES	RATIONALE FOR THE IMPLEMENTATION OF GUIDELINES
5. Registered professional nurses, midwives and other healthcare professionals should continuously educate CTOP clients on reproductive health issues to raise awareness	Unwanted pregnancies affect the health and wellbeing of many women especially the youth. Women around the world continue to be vulnerable with unwanted pregnancy due to lack of knowledge. The situation places them at risk of morbidity and mortality related to unsafe termination of pregnancy methods. Continuous education will capacitate clients to understand their sexuality in terms of reproduction and to acquire knowledge to manage their sexual behaviour.
6. Registered professional nurses, midwives and other healthcare professionals must design a tool to continuously monitor and evaluate the outcomes of CTOP services in public health facilities to reduce repeat CTOP requests	CTOP outcomes measure the effectiveness of the CTOP programme towards improving the health of women. A reduction in the number of serious adverse events is evident that the CTOP programme is effective. However the number of repeat CTOP requests are sky rocketing. This challenge indicates a gap in the reproductive health system needing urgent attention.

7.4.5 TRUSTWORTHINESS IN GUIDELINES

In this study trustworthiness was ensured by assessing the scale of reliability of the instrument using Cronbach's alpha. The value of the Cronbach's alpha came as 0.85 rendering the instrument good to excellent. In quantitative research, reliability, vaidity and objectivity are considered to ensure trustworthiness in a study (Anney 2014:272). Guidelines are evidence-based recommendations assisting healthare professionals in making decisions to promote optimal care to clients. Guidelines are considered trustworthy when they are developed in line with the AGREE II instrument, backed by the relevant literature and have a structured process of finding consensus as stated by (Horvath, Semlitsch, Jeitler, Abuzahra, Posch et al 2016:1). In this study trustworthiness

was achieved by requesting the services of the statistician to assist with data interpretation. The sample population is seen to be representative of the entire population and the results will be generalized. The use of modified Delphi method ensured trustworthiness. Sourcing experienced and knowledgeable expert to participate and contribute rich information during guideline development assisted in ensuring trustworthiness.

7.4.6 Review of guidelines

Guidelines require regular review to ensure they stay within the standard set to improve the quality of care. Guidelines should be developed with review in mind to ensure they are updated as and when new knowledge is published. Miravitless, Vogelmeier, Roche, Halpin, Cardoso, Chuchalin, Kankaanranta, Sandstrom, Sliwinaski, Jaromir and Blasi (2015:635) support guideline review to keep pace with research updated information.

7.5 IMPLICATIONS

The study findings revealed the challenges experienced in CTOP services in public health facilities. Addressing these challenges might improve the quality of CTOP services in public health facilities. CTOP services are focused on reducing maternal morbidity and mortality and thus it was imperative that the unit be researched in order to improve CTOP outcomes.

7.6 RECOMMENDATIONS

In this chapter the following recommendations were made with reference to nursing education, management, nursing practice, guidelines and nursing research stemming from the guidelines developed:

7.6.1 Recommendations for nursing education

- Student nurses should be allocated to work in CTOP services during their third year to improve their CTOP knowledge. This practice will ensure all nurses have an understanding and are up to date with CTOP practices.
- Reasonable number of hours should be allocated from the college for CTOP services. It should form part of reproductive health education.
- Well trained nurses perform their duties diligently with understanding thus rotation to the CTOP unit during training is recommended.
- Adequate information should be displayed for CTOP clients to be well informed on the services rendered and times available.
- The use of contraceptives should be emphasised to reduce repeat CTOP requests.
- Clients should be continuously educated on reproductive health services and prevention of unwanted pregnancy.
- Road shows and school visits should be used as platforms to strengthen prevention of unwanted pregnancies.

7.6.2 Recommendations for nursing management

- The Provincial Department of Health should spearhead the renovations of CTOP services in public health facilities. A budget should be made available to ensure the CTOP unit receives a facelift.
- Health facility managers should support the CTOP services and attend scheduled meetings with the CTOP staff to discuss the challenges facing the unit
- Management should create a conducive environment in the CTOP unit to improve productivity by ensuring the unit has the necessary resources both material and human.
- Management should ensure that the CTOP unit meet the required standards to operate optimally. Have a plan to renovate it to look more feminine.

- CTOP services should be included in the annual budget of the facility for maintenance of the unit.
- A doctor should be allocated to manage complicated CTOP clients in all CTOP units e.g. CTOP request post C/section delivery.

7.6.3 Recommendations for nursing practice

- Healthcare professional should ensure the provision of privacy to all CTOP clients during consultation and should keep their voices down so the next person should not hear the conversation.
- All CTOP clients should be respected despite their economic status, age or reason for terminating the pregnancy.
- Healthcare professionals should comply with the set CTOP standards and advocate for CTOP clients.
- CTOP clients should receive counselling to assist them to base their decisions on information received from professionals.
- All repeat CTOP clients to be closely monitored for advice on prevention of unwanted pregnancy and be encouraged use contraceptive to prevent unwanted pregnancies.

7.6.4 Recommendations for implementation of guidelines

- The guidelines should be implemented to improve the quality of CTOP services in public health facilities
- Develop a plan to monitor the implementation of the guidelines
- Doctors, registered professional nurses and midwives, psychologists and social workers should support guidelines implementation to improve the quality of CTOP services in public health facilities.

7.6.5 Recommendations for research

- The use of qualitative and or mixed method research for the development of guidelines to improve the quality of CTOP services in public health facilities
- Replication of the study to compare with other public health facilities rendering the same CTOP services.
- Inclusion of other category of staff working in the CTOP unit.
- The study might use another quality model to produce better results

7.7 LIMITATIONS

The study was conducted in eight CTOP clinics in the Tshwane district in Gauteng Province. The initial plan was to use ten CTOP clinics however, two clinics were found to have suspended the provision of the CTOP services. It may be necessary to conduct similar studies in other districts in Gauteng so as to get a broader scope of the quality of other CTOP clinics.

The study did not include other category of staff working in the CTOP unit who could have provided different responses to the questionnaires. The age limit for the participants was 18 years excluding the 12 year old who request for termination of pregnancy services as stipulated in the CTOP Act (1 of 2008). The study design was quantitative however the use of qualitative or mixed method might improve the results of the study. There was a poor response from the modified Delphi experts recruited to participate in the guidelines development.

Despite the limitations, the study was successful in developing guidelines to improve the quality of CTOP services in public health facilities. The research objectives were met and guidelines to improve the quality of CTOP services in public health facilities were developed. The developed guidelines will assist policy makers and managers to plan the improvement of the current status of CTOP services in public health facilities

7.8. CONTRIBUTION TO THE BODY OF KNOWLEDGE

CTOP services remain highly researched nationally, internationally and locally, however gaps still exist in the reproductive health system. The findings of the study provided useful information regarding the gaps that still exist in CTOP services. Developing guidelines to improve the quality of CTOP services in public health facilities might contribute to the body of knowledge in nursing especially in the reproductive health services. The study used the Donabedian model of quality care as a theoretical framework. The Donabedian model was appropriate for this study since it looked at CTOP services comprehensively.

The information from this study might assist in improving the structure, processes and outcomes of CTOP services in public health facilities. The CTOP services are highly likely to receive more attention from policy makers and managers to ensure the inadequate structure is given a face lift to restore the dignity of women's health.

The researcher recommended that the CTOP Act be reviewed to include annexures that will address the highlighted repeat request of CTOP services by clients. The researcher strongly believes that this initiative can reduce repeat requests to terminate a pregnancy.

7.9 FINAL CONCLUSION

The study aimed to develop guidelines to improve the quality of CTOP services in public health facilities. The findings of the study provided insight on the challenges experienced in CTOP services in public health facilities with regard to the structure, processes and outcomes. The study succeeded in determining the current status of CTOP services in public health facilities despite the limitations encountered. The research objectives of the study were met and guidelines to improve the quality of CTOP services in public health facilities were developed.

The study achieved the objectives set and may contribute to the improvement of the quality of CTOP services in public health facilities. It may further attract the attention of management and policy makers to revisit the infrastructure revitalisation programme to include CTOP services to achieve the objectives of the study.

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ANNEXURE A

INFORMATION LEAFLET AND INFORMED CONSENT

P.O Box 667, Pretoria, 0001 – Republic of South Africa
Web: https://www.up.ac.za Tel: (012) 354-1450/2125 Fax: (012) 354-1490

INFORMATION LEAFLET AND CONSENT

Researchers' name	Lillian Jabu Nkosi
Student Number	98297890
Department	Nursing Science
Institution	University of Pretoria

Development of guidelines to improve the quality of CTOP services in public health facilities in the Tshwane district in Gauteng Province

Dear Expert

1. INTRODUCTION

This is an invitation to participate in the research study with the above tittle. This information document is meant to provide you with full understanding of what the study is about, what it aims to achieve and the processes of the whole research. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the researcher.

2. THE NATURE AND PURPOSE OF THE STUDY

The aim of the study is to develop guidelines to improve the quality of the choice on termination of pregnancy services in public Health facilities. The invitation is for you to participate in a consensus building that will be conducted using the modified Delphi technique method. You have been identified as a possible participant because of your

extensive knowledge in the topic being discussed and the commitment you have shown in working with women's reproductive health.

3. EXPLANATION OF PROCEDURES TO BE FOLLOWED

The experts in the field under study will be interviewed. The expert will be required to share the knowledge on the current state of CTOP services in public health facilities. An interview will be conducted to reach consensus. The modified Delphi method has three rounds from which to reach consensus.

4. RISK AND DISCOMFORT INVOLVED

There are no risks associated with this study.

5. POSSIBLE BENEFITS

There are no benefits for the experts participating in this study. However this is an opportunity for the participants to voice out their expectations with regard to the current state of quality of Choice on Termination of Pregnancy (CTOP) services in public health facilities. The guidelines developed will be applied nationally because the problems of CTOP services in public health facilities are universal in South Africa.

6. WHAT ARE YOUR RIGHTS AS A PARTICIPANT?

Participation in this study is voluntary. The experts are not obliged to complete the interview and may withdraw from the study at any point in time if they so wish without prejudice.

7. HAS THE STUDY RECEIVED ETHICAL APPROVAL?

The study has received written approval from the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria.

8. INFORMATION AND CONTACT PERSON

Lillian Jabu Nkosi is the contact person in this study. For any clarity do not hesitate to contact me at: 072 603 1368. Alternatively you can contact my supervisor Professor F.M Mulaudzi at 012 354 2125 or the co-supervisor Professor M.D Peu at 012 354 2133.

9. COMPENSATION

Participation in this study is on a voluntary basis. However travel expenses will be covered.

10. CONFIDENTIALITY

The interview will be conducted in a separate information collected during this study will be kept strictly confidential and will be used only for the purpose of the study. All information that you offer will be kept strictly private. The information gathered is the material of the University of Pretoria and will not include your name. Research reports and articles in scientific journals will not include any information that may recognize you.

Consent to participate in this study

I confirm that the person asking for my consent to take part in this study has provided me with information indicating the nature, processes, risks, discomfort and benefits of the study. I have also received, read and understood the above written participation information leaflet regarding this study. I am aware that the results of the study, including personal details, will be anonymously processed into research reports. I am participating willingly.

I have had time to ask questions and have no objection to participate in the study. I understand that there is no penalty should I wish to discontinue participation in the study and my withdrawal will not affect me in any way.

Participant's Name: ___________________________ Date: ___________________
(Please print)

Participant's Signature: _________________________ Date: ____________________
(Please print)

Researcher's Name: Lillian Jabu Nkosi

Researcher's Signature: ______________________

ANNEXURE B

GUIDING QUESTIONS

Guiding questions: To be answered by CTOP participants

Section A: Population 1(Healthcare provider)

Please write an **X** next to the response that applies to you have for each question in the questionnaire (except where otherwise indicated). The squares on the right are for official use only.

Demographic data

Please mark with an **X** in the appropriate box.

			For official use only
1.	**Age in years**		
	21 - 30		
	31 - 40		
	41 - 50		
	51 and above		
2.	**Gender**		
	Male		
	Female		
3.	**Marital status**		
	Single		
	Married		
	Live in partner		
	Widow		
4.	**Current position at work**		
	Health facility manager		
	Quality manager		
	Registered professional nurse		

	Registered midwife		
5.	**Job grade/level**		
	P/NA 2		
	P/NA 3		
	P/NA 4		
	P/NA 5 (Operational manager)		
6.	**Additional qualifications**		
	Advanced midwifery		
	Others (specify)		
7.	**Which institution do you presently work in?**		
	Community Health Centre		
	District Hospital		
	Regional Hospital		
	Tertiary Hospital		
	Central Hospital		
8.	**How many years (experience) as a registered nurse/midwife?**		
	0 - 5 years		
	6 - 10 years		
	10 years and above		
9.	**How many years (experience) in this unit?**		
	0 - 5 years		
	6 - 10 years		
	10 years and above		
10.	**How many hours do you work per day?**		
	8 hrs.		
	12 hrs.		
11.	**Allocation**		
	Rotation		

	Fixed		
	Both		
12.	**Development on CTOP services**		
	Attend in-service		
	Attend workshops		
	Attend symposiums		
	None of the above		

Section B

To what extent are these statements true or false with regard to the quality of the structure of TOP services in public health facilities?

Place/Choose **Yes** or **No** by marking with an **X** in the appropriate column.

Item		Yes	No	For office use only
1.	The facility structure allows delivery of quality CTOP services			
2.	The space provided for rendering CTOP services is adequate			
3.	The CTOP unit is air conditioned and well ventilated			
4.	There is a post CTOP rest room for clients			
5.	There is a tea room for nurses			
6.	There is a nurses' station in the unit			
7.	The CTOP structure allows for privacy			
8.	The CTOP environment is inviting/pretty			
9.	There is enough equipment for delivery of CTOP service			
10.	There is new equipment in CTOP unit			
11.	Equipment maintenance is provided timeously			
12.	The CTOP environment is clean			
13.	There are enough registered professional nurses and midwives allocated to the CTOP units			
14.	Registered professional nurses and midwives are trained in CTOP services			
15.	Registered professional nurses and midwives in			

	CTOP clinics rotate to other units			
16.	The principle of skill mix is practised in CTOP unit			
17.	There is a programme in place to develop CTOP registered professional nurses and midwives			
18.	Registered professional nurses and midwives in CTOP units are allocated to night duty			
19.	There are incentives for registered professional nurses and midwives working in CTOP units			
20.	CTOP registered professional nurses and midwives are allocated to other units			
21.	Doctors are allocated to CTOP units to assist in case of an emergency			
22.	CTOP services operate uninterrupted daily			
23.	Many clients are seen daily in CTOP units			
24.	Repeat patients are seen frequently in CTOP units			
25.	CTOP clinics are easily accessible			
26.	CTOP units operate for 12hrs. daily			

27. List in your own words four **(4)** key areas you would like to see improved in the facilities available in the CTOP service.

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28. List four **(4)** challenges you face in your work daily.

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Section C

To what extent do you agree with the following statements with regard to the quality of the **processes** in CTOP services in public health facilities?

Place/Choose **Yes** or **No** by marking with an **X** in the appropriate column.

Item		Yes	No	For office use only
1.	Information with regard to service times are well displayed			
2.	Clients are received warmly by staff			
3.	Waiting time to receive service is monitored to improve quality			
4.	Clients are counselled before CTOP			
5.	There is compliance to the set CTOP standards			
6.	Health education with regard to CTOP is given to clients			
7.	Registered professional nurses and midwives display a positive attitude towards clients			
8.	The procedure for procuring CTOP is explained to clients			
9.	CTOP processes are assessed to ensure continuous quality care			
10.	Clients are offered post-CTOP counselling			
11.	All clients' information is recorded to improve quality			
12.	Nursing audits are done to improve quality of CTOP services			
13.	Policies are followed when rendering CTOP services			

14.	Client satisfaction surveys are conducted to improve quality of CTOP services			
15.	CTOP information records are up to date			
16.	CTOP standards, policies and protocols are user-friendly			
17.	There are files with the latest CTOP information in the unit			
18.	There are serious adverse events with the CTOP services			
19.	Monthly meeting are held with all stakeholders			
20.	There is an improvement in the knowledge about CTOP among clients			
21.	There is a booking system in place			
22.	Bookings are controlled to manage the clients			

23. List in your own word **4** key areas to improve the **processes** of CTOP services.
………
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24. List in your own word **4** key challenges you face daily in your work with CTOP **processes.**
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Section D

To what extent do you agree with the statements with regard to the **outcomes** of CTOP services in public health facilities?

Place/Choose **Yes** or **No** by marking with an **X** in the appropriate column.

Item		Yes	No	For office use only
1.	CTOP service are satisfactory			
2.	Nurses empathise with clients			
3.	Clients are counselled before the procedure			
4.	The procedure is explained to the client			
5.	Clients ask questions related to CTOP services			
6.	Clients are aware of their rights with regard to CTOP services			
7.	Clients recommend others to use our clinic			
8.	Clients are completely satisfied with the nurses' with the service delivery			
9.	Treatment is given post-CTOP procedure			
10.	There is a change in the clients' health status after CTOP			
11.	Effective CTOP outcomes are noted			
12.	The public health facility is rated effective on CTOP management			
13.	Registered professional nurses and midwives have a positive attitudes towards clients			
14.	Contraceptive are given post-CTOP			
15	There is no infection post-CTOP to our clients			

16.	There is no report of complications post-CTOP			
17.	Client and registered professional nurses and midwives relationships are good			
18.	There is mutual trust between clients and registered professional nurses and midwives			
19.	There are few or no CTOP repeats			
20.	Bleeding is minimal post CTOP procedure			

21. List in your own words 4 key areas of improvement you would like to see with regard to **outcomes** of CTOP services.

....

....

....

....

22. List in your own words **4** key challenges you face with CTOP **outcomes** in your work daily.

....

....

....

....

....

Section E: Population 2 (Clients)

Demographic data

Please write an **X** next to the response that applies to you for the question in the questionnaire (except where otherwise indicated). The squares on the right are for official use only.

Please mark with an **X** in the appropriate box.

			For official use only
1.	**Age in years**		
	18 - 20		
	21 - 30		
	31 - 40		
	41 and above		
2.	**Marital status**		
	Single		
	Married		
	Live-in partner		
	Widow		
3.	**Current status**		
	Student/scholar		
	Employed		
	Not employed		
	Housewife		
4.	**Which public health facility do you attend?**		

	Community Health Centre		
	District Hospital		
	Regional Hospital		
	Tertiary Hospital		
	Central Hospital		
5.	**How many children do you have?**		
	0		
	1 - 2		
	3 or more		
6.	**How many times were you pregnant?**		
	Never		
	Once		
	Twice		
	Three or more times		

Section F: Population 2 (Clients)

To what extent do you agree with the statements with regard to the **outcomes** of CTOP services in public health facilities?

Place/Choose **Yes** or **No** by marking with an **X** in the appropriate column.

Item		Yes	No	For office use only
1.	CTOP services are helpful			
2.	There is a warm welcome and welcoming feeling in the CTOP clinic in public health facilities			
3.	Counselling is done before the CTOP procedure			
4.	The CTOP procedure is explained before beginning with it			
5.	You resume school/work immediately after the CTOP procedure			
6.	CTOP can be done at 16 weeks			
7.	You travelled far to access the CTOP services			
8.	This is your first CTOP service			
9.	You were given a follow-up date post-CTOP procedure			
10.	You bled after the CTOP procedure			
11.	You felt relieved after the CTOP procedure			
12.	Your pregnancy was terminated by a doctor in a public health facility			
13.	You paid for the CTOP service			
14.	Contraceptive were given after the CTOP procedure			
15	A Sonar was done before CTOP			
16.	There is privacy in CTOP clinics in public health facilities			

17.	CTOP services are offered over weekends and during public holidays			
18.	You waited long on the CTOP booking list			
19.	There is a post-CTOP rest room in public health facilities			
20.	The pain is unbearable post-CTOP procedure			
21.	CTOP is done in a clean environment			
22.	You developed infection post-CTOP procedure			
23.	You felt depressed after CTOP has been performed			
24.	You were satisfied with the CTOP results			
25.	You will tell friends about CTOP			

26. List in your own words **4** key areas of improvement you would like to see with regard to **outcomes** of CTOP services in public health facilities.

....

....

....

....

27. List in your own words **4** key challenges you faced with regard to CTOP **outcomes** in the public health facility you attended.

....

....

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....

....

THANK YOU!

ANNEXURE C

INFORMATION LEAFLET FOR PANEL OF EXPERTS

Dear expert participant

Invitation to participate in the development of guidelines to improve the quality of the Choice on Termination of Pregnancy services in public health facilities in the Tshwane district in Gauteng Province

I am a PhD student in the department of Nursing Science, Faculty of health Sciences at the University of Pretoria. I am conducting a study on the development of guidelines to improve the quality of CTOP services in public health facilities. The study is supervised by Professor F.M Mulaudzi and Professor D.M Peu. The purpose of the study was to develop guidelines to improve the quality of CTOP services in public health facilities.

The objectives of the study were to:

- assess the quality of the structure of CTOP services in public health facilities
- determine the quality of the processes of CTOP services in public health facilities
- evaluate the quality of the outcomes of the CTOP services in public health facilities

In phase 1 of the study a quantitative, non-experimental cross-sectional survey approach was used to assess the quality of the CTOP services in public health facilities. Data was collected using questionnaires from health facility and quality managers, registered professional nurses and midwives rendering CTOP services and clients. The findings revealed challenges with the CTOP structure, processes and outcomes.

Structural challenges identified were:

- inadequate space
- unavailability of a rest room
- unavailability of ablution facilities for clients
- dull environment
- lack of privacy
- no nurses' station
- no tea room for nurses

Process challenges identified were as follows:

- monitoring of waiting time
- compliance to set standards
- equipment maintenance
- frequent CTOP repeats
- display of information with regard to service times
- monthly meetings with stakeholders
- nursing audits to improve quality
- availability of the latest CTOP information
- rotation of CTOP nurses to other units

Outcomes challenges were as follows:

- professional nurses attitude
- giving of health education regarding CTOP
- post-CTOP counselling of clients
- availability of booking system

The challenges in the quality of CTOP services were expressed in the Donabedian concepts of quality care, namely structure, processes and outcome.

In phase 2 of the study the researcher developed preliminary guidelines to improve the quality of CTOP services based on the findings from phase 1 and literature review on the three concepts of Donabedian's quality care model.

You are therefore invited to participate in the refinement of the developed guidelines which aims to improve the quality of CTOP services. There are six guidelines followed by actions that should be taken by health facility and quality managers, healthcare professionals and policy makers in the assessment of the quality of CTOP services in public health facilities. You are requested to read each guideline and comment on the applicability thereof or make suggestions where deemed necessary.

Your contribution and inputs will be highly appreciated. For any clarity seeking feel free to contact the researcher on:

Mrs Lillian Jabu Nkosi

E-mail: lillianj.nkosi@gmail.com

Cell: 072 603 1368

ANNEXURE D

ETHICAL APPROVAL LETTER, UNIVERSITY OF PRETORIA

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 22/04/2017.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

27/11/2014

Approval Certificate
New Application

Ethics Reference No.: 446/2014

Title: DEVELOPMENT OF GUIDELINES TO IMPROVE THE QUALITY OF THE CHOICE ON TERMINATION OF PREGNANCY SERVICES IN PUBLIC HEALTH FACILITIES IN TSHWANE DISTRICT IN GAUTENG PROVINCE

Dear Mrs Lillian Nkosi

The **New Application** as supported by documents specified in your cover letter for your research received on the 29/10/2014, was approved by the Faculty of Health Sciences Research Ethics Committee on the 26/11/2014.

Please note the following about your ethics approval:
- Ethics Approval is valid for 1 year.
- Please remember to use your protocol number (**446/2014**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:
- The ethics approval is conditional on the receipt of 6 monthly written Progress Reports, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Professor Werdie (CW) Van Staden
MBChB MMed(Psych) MD FCPsych FTCL UPLM
Chairperson: Faculty of Health Sciences Research Ethics Committee

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

☎ 012 354 1677 🖷 0866516047 deepeka.behari@up.ac.za http://www.up.ac.za/healthethics
✉ Private Bag X323, Arcadia, 0007 - 31 Bophelo Road, HW Snyman South Building, Level 2, Room 2.33, Gezina, Pretoria

ANNEXURE E

CLEARANCE CERTIFICATE, TSHWANE RESEARCH COMMITTEE

243 Pretorius Street, Cnr. Thabo Sehume & Pretorius Street, Manaka Building, Pretoria 0001 South Africa.
Tel: +27 12 406 0237
Enquiries: Mr. Peter Silwimba.
e-mail: peter.silwimba@gauteng.gov.za

TSHWANE RESEARCH COMMITTEE

CLEARANCE CERTIFICATE

Meeting: N/A

PROJECT NUMBER: 09/2015

Title: Guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in the Tshwane district in Gauteng Province
Researcher: Jabu Nkosi
Co-Researcher:
Supervisor: Prof Mulaudzi
Department: Nursing Science

DECISION OF THE COMMITTEE

Approved

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

Date: 25/03/15

....
Mr. Peter Silwimba
Chairperson Tshwane Research Committee
Tshwane District

....
Mr. Pitsi Mothomone
Chief Director: Tshwane District Health
Tshwane District
2015-03-27

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

ANNEXURE F

PERMISSION LETTER, DR GEORGE MUKHARI ACADEMIC HOSPITAL

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Dr. George Mukhari Academic Hospital

Office of the Director Clinical Services
Enquiries : Dr. P. Shembe
Tel : (012) 529 3880
Fax : (012) 560 0099
Email: petunia.shembe@gauteng.gov.za
kedibone.matsimela@gauteng.gov.za

To : Ms LJ Nkosi
Department of Nursing Science
University of Pretoria
Private Bag x 323
Arcadia
0007

Date : 23 December 2014

PERMISSION TO CONDUCT RESEARCH

The Dr. George Mukhari Hospital hereby grants you permission to conduct research on "Development of Guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane District in Gauteng Province at the Dr. George Mukhari Hospital."

This permission is granted subject to the following conditions:

- That you obtain Ethical Clearance from the Human Research Ethics Committee of the relevant University
- That the Hospital incurs no cost in the course of your research
- That access to the staff and patients at the Dr George Mukhari Hospital will not interrupt the daily provision of services.
- That prior to conducting the research you will liaise with the supervisors of the relevant sections to introduce yourself (with this letter) and to make arrangements with them in a manner that is convenient to the sections.

Yours sincerely

DR RMT MABUSELA
ACTING DIRECTOR: CLINICAL SERVICES

Supported

2015 -02- 03

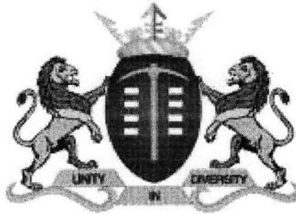
Dr George Mukhari Academic Hospital
Medunsa Drive
PRETORIA
0001

Private Bag X422
PRETORIA
0001

DR. F. KGONGWANA
DEPUTY CEO
@DGMAH

ANNEXURE G

PERMISSION LETTER, KALAFONG TERTIARY HOSPITAL



GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

KALAFONG HOSPITAL
PRIVATE BAG X396
PRETORIA
0001
26 JANUARY 2015

ENQUIRIES	**:**	**DR D. MALINGA- UBOMBA**
TEL	**:**	**012 318 6503**
FAX	**:**	**012 373 9021**

RE: PERMISSION TO CONDUCT RESEARCH

Title:development of guidelines to improve the quality of the choice of termination of pregnancy services in public health facilities in the Tshwane district in Gauteng province .

Permission is hereby granted for the research to be conducted at Kalafong Hospital. This approval is given on the condition that ethics clearance will be obtained from the training institution ethics committee.

DR D. UBOMBA
MEDICAL MANAGER
KALAFONG HOSPITAL

GAUTENG PROVINCIAL GOVERNMENT
KALAFONG HOSPITAL / HOSPITAAL
26 JAN 2015
PRIVATE BAG / PRIVAATSAK X396 PRETORIA 0001
SUPERINTENDENT'S OFFICE

ANNEXURE H

PERMISSION LETTER, JUBILEE DISTRICT HOSPITAL

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to L. J. Nkosi (name of researcher) to do ~~his~~ or her research on Development of guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane District in Gauteng Province (research topic) in

/ (name of clinic) or

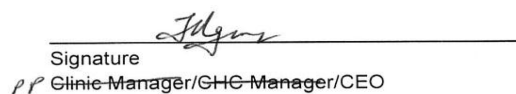
/ (name of CHC) or

Jubilee District Hospital (name of hospital).

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

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

That we receive research results



Signature

pp ~~Clinic Manager~~/~~CHC Manager~~/CEO

20/01/2015

Date

ANNEXURE I

PERMISSION LETTER, ODI DISTRICT HOSPITAL

5

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to Lillian Jabu Nkosi (name of researcher) to do his or her research on Development of guidelines to improve the quality of the choice on termination of pregnancy services (research topic) in ____ (name of clinic) or

____ (name of CHC) or

ODI DISTRICT HOSPITAL (name of hospital).

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

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

Approved on behalf of Mrs M.D.M Lekgoe (CEO) ODI DISTRICT HOSPITAL

[signature] Nsm Acting CEO

Signature

~~Clinic Manager~~/~~CHC Manager~~/CEO

15/01/2015

Date

ANNEXURE J

PERMISSION LETTER, SOSHANGUVE III COMMUNITY HEALTH CENTRE

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to __Lillian Jabu Nkosi____________________________________ (name of researcher) to do his or her

research on __Development of guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane district in Gauteng Province.____ (research topic) in

____ (name of clinic) or

__________SOSHANGUVE III____ (name of CHC) or

____ (name of hospital).

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

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

No extra roona nor personnel can be allocated for the research.

____
Signature
Clinic Manager/CHC Manager/CEO

21/01/2015
____
Date

ANNEXURE K

PERMISSION LETTER, PHEDISONG 4 COMMUNITY HEALTH CENTRE

5

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to __Lillian Jabu Nkosi___________________________________ (name of researcher) to do his or her

research on __Development of guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane district in Gauteng Province.____ (research topic) in

____ (name of clinic) or

_________PHEDISONG 4____ (name of CHC) or

____ (name of hospital).

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

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

Permission has been granted.

Signature
Clinic Manager/CHC Manager/CEO

21/01/2015
Date

ANNEXURE L

PERMISSION LETTER, KGABO COMMUNITY HEALTH CENTRE

5

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to __Lillian Jabu Nkosi__________________________________ (name of researcher) to do his or her

research on __Development of guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane district in Gauteng Province.____ (research topic) in

___________KGABO____ (name of clinic) or

____ (name of CHC) or

____ (name of hospital).

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

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

We will assist her on her research project.

____
Signature
Clinic Manager/CHC Manager/CEO

2015.01.21
____
Date

ANNEXURE M

PERMISSION LETTER, LAUDIUM COMMUNITY HEALTH CENTRE

Annexure 1

Declaration of intent from the clinic manager or hospital CEO

I give preliminary permission to __Lillian Jabu Nkosi____________________________________ (name of researcher) to do his or her

research on __Development of guidelines to improve the quality of the choice on termination of pregnancy services in public health facilities in Tshwane district in Gauteng Province.____ (research topic) in

____ (name of clinic) or

_________LAUDIUM____ (name of CHC) or

____ (name of hospital).

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

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

She is most welcomed to do her research at our facility. We shall assist her where possible.

Signature
Clinic Manager/CHC Manager/CEO

2015/01/21
Date