EVALUATION OF THE QUALITY OF COUNSELLING FOR PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV OFFERED TO PREGNANT WOMEN IN THE COPPERBELT PROVINCE OF ZAMBIA.

By

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A mini-thesis submitted in partial fulfilment of the requirement for the degree of Masters in Public Health (MPH)

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Abstract:

Background: One study on estimating rates of mother to child transmission of HIV (MTCT) in program settings in Zambia showed significant reduction in the MTCT rate with some specific prevention of mother to child transmission of HIV (PMTCT) interventions. Prolonged breastfeeding and mixed feeding practices by HIV positive mothers increased the MTCT rate by more than double by the time the infant reached 6 to12 months of age. Although the study did not assess the quality of PMTCT counselling in antenatal care settings, literature shows that poor quality of counselling on PMTCT reduces the effectiveness of PMTCT interventions.

Study aim: To evaluate the quality of PMTCT counselling offered to pregnant women attending antenatal care (ANC) services in four public health facilities in Kitwe, Copperbelt province of Zambia.

Study design and data collection: This was a cross sectional descriptive study. Data was generated using qualitative research methods including document analysis and individual interviews with 22 participants using non-participant observations, client exit interviews and focus group discussions (FGDs) to collect data**.** The study participants were ANC attendees and PMTCT providers. Two FGDs were conducted with a total of 98 counselling observations done and 16 ANC client exit interviews. Client exit interviews were done immediately after the mothers had undergone PMTCT counselling

Results: Content for group health education (GHE) varied across the facilities. Individual pre-test, post-test and follow up counselling sessions were very short and lacked depth. A total of 41 (83.7%) pre-test observations took between 1 and 5 minutes to be conducted. In addition, several key topics including major modes of HIV transmission, MTCT and the "window period" were omitted. The counsellors' interpersonal skills were generally good but they did not consistently summarize the main issues. The 16 mothers interviewed had limited knowledge of PMTCT with only one client knowing all the MTCT modes correctly.

Discussion: Quality of PMTCT counselling did not meet expectations. With a lot of key topics omitted, outcomes of PMTCT interventions may not be as good as expected. Facilities are faced with serious staff shortages and limitations with space. The few members of staff available are overworked and are not able to provide quality PMTCT

counselling.

Conclusion: While the PMTCT uptake was good and clients felt satisfied, the quality of PMTCT counselling is compromised. There is need to improve it and ensure optimal effectiveness of PMTCT services.

DECLARATION

I, the undersigned, hereby declare that the work contained in this mini-thesis is my own original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it at any university or other learning institution for obtaining a qualification.

Andrew Kumwenda 15th February, 2012

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KEYWORDS:

- Client satisfaction
- Effectiveness
- Evaluation
- HIV and AIDS
- “Opt out” policy
- Prevention of Mother to Child Transmission (PMTCT)
- Quality of HIV Testing and Counselling
- Retesting
- Voluntary Counselling and Testing;
- “Window period”

ABBREVIATIONS:

AFASS	Affordable, Feasible, Acceptable, Sustainable and Safe
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral treatment
ARVs	Antiretroviral drugs
CDC	Centers for Disease Control and Prevention
FHI	Family Health International
FGDs	Focus group discussions
GHE	Group health education
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
IYCF	Infant and Young Child Feeding
MOH	Ministry of Health
MNCH	Maternal, Newborn and Child Health
MTCT	Mother to Child Transmission of HIV
PMTCT	Prevention of Mother to Child Transmission of HIV
STI	Sexually transmitted infection (STI)
UNAIDS	Joint United Nations Program on HIV/AIDS
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
ZDHS	Zambia Demographic and Health Survey
ZPCT	Zambia Prevention Care and Treatment Partnership

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CHAPTER 1: STUDY BACKGROUND:

1.1. Introduction:

More than 90% of all children under the age of 15 years living with Human Immunodeficiency Virus (HIV) acquired the infection through mother to child transmission of HIV (MTCT) (Joint United Nations Programme on HIV/AIDS (UNAIDS), 2008). MTCT can occur during pregnancy, at the time of birth or after birth through breastfeeding (World Health Organization (WHO), 2006). Without interventions, the risk of MTCT is estimated to range from 20% to 45% (WHO, 2010).

Zambia has adopted the WHO comprehensive strategic approach for PMTCT which constitutes a full range of PMTCT interventions (WHO, 2007). The approach includes: primary prevention of HIV infection among women of child bearing age; prevention of unintended pregnancies among women living with HIV; prevention of HIV transmission from mothers living with HIV to their infants and providing appropriate care, treatment and support to mothers living with HIV, their children and families (WHO, 2006:11).

The effectiveness of PMTCT programmes is initially determined by the proportion of pregnant women who undergo HIV testing and counselling which is the entry point for specific PMTCT interventions (Tindyebwa et al., 2004). PMTCT counselling services are expected to meet the needs of pregnant women and their children in a professional manner. The services should be linked to specific PMTCT interventions that provide maximum benefits to both the infants and the mothers and enable reduction in the MTCT rate (Ministry of Health (MOH), 2007). With the global goal of eliminating paediatric HIV infections and improving maternal, newborn and child health (MNCH) and survival, there is need to ensure that quality PMTCT counselling services are provided and relevant PMTCT interventions instituted (WHO, 2010). The full benefits of PMTCT programmes may not be realized if the quality of counselling provided for PMTCT is compromised.

1.2. The Zambian PMTCT programme:

It is estimated that about 80,000 infants born every year in Zambia risk acquiring HIV through MTCT (MOH, 2010). To address the burden of MTCT in Zambia, the PMTCT programme was initiated in 1999 (MOH, 2010). The programme uses the "opt out" policy to HIV counselling and testing in antenatal care (ANC). This means that HIV testing is routinely recommended and provided to all ANC clients as part of the routine laboratory processes undertaken in ANC unless the client "opts out" (MOH, 2008). Health care workers and lay counsellors trained and / or mentored in PMTCT are expected to provide quality PMTCT counselling services that are in line with the national PMTCT protocol guidelines. The current national PMTCT guidelines were revised and printed in 2010.

1.2.1. Group Health Education:

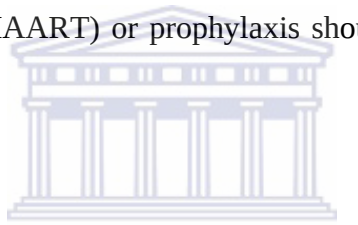
The Zambia PMTCT programme provides PMTCT counselling to ANC clients mainly through Group Health Education (GHE) (MOH, 2008). The GHE is done at the health facilities during ANC on certain designated days and times. GHE is expected to provide the ANC attendees with information on basics of HIV and AIDS, prevention (including PMTCT), the HIV testing process and results, importance of couple testing and counselling, infant and young child feeding (IYCF), family planning (FP), linkages to other services such as antiretroviral therapy (ART) among other things (MOH, 2010). The sessions are designed to be interactive between the ANC attendees and the service providers. GHE serves as the group pre-test counselling and each ANC attendee is expected to be tested for HIV after attending the GHE session. All the other necessary ANC services are also provided at the same time.

1.2.2. Individual pre-test and post-test counselling sessions:

Individual pre-test counselling is reserved for clients requiring further clarifications following GHE or those who may have declined to be tested for HIV. Adequate post-test counselling is expected to be provided to all women and their partners regardless of the outcome of their HIV test results. The PMTCT counsellors are also required to maintain

high standards of care in order to enable the clients make appropriate choices and decisions in the context of PMTCT (MOH, 2008).

For post-test counselling, the session is supposed to focus on health, safer sexual practices and the high risk of MTCT that exists if the mother seroconverts[1] during pregnancy or breastfeeding. An option of re-testing[2] after three months or later in pregnancy should be given to HIV negative pregnant women and their partners. The "Opt out" policy is still emphasised during the follow up visits. For HIV positive clients, the PMTCT counsellors are expected to identify immediate client concerns, what difficulties the client foresees and how she might deal with them, discuss who, when and how she will consider disclosing the HIV test results to her partner if she was tested without the partner. Blood samples for CD4 assessment to enable determining eligibility for highly active antiretroviral therapy (HAART) or prophylaxis should be done preferably on the day of HIV diagnosis.



1.3. Definition of terms:

1.3.1. Quality PMTCT counselling:

Quality of services provided in a setting is a dimension of performance of the system that delivers the particular services (WHO, 2010). This is usually expressed in terms of the service providers' compliance with evidence-based standards of care. Quality of PMTCT counselling can be defined in terms of the PMTCT provider's technical standards (i.e. methods, processes and practices) and the pregnant women's expectations (Brown et al., 1998).

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[1] *Seroconverting is when a sufficient quantity of HIV antibodies are produced by a person to become detectable on a given HIV antibody and/or antigen assay (WHO, 2010).*

[2] *Retesting refers to a situation where additional testing is performed on a new specimen on someone after a specified period of time for explicit reasons, such as a specific incident of possible HIV exposure within the past three months, or ongoing risk of HIV exposure such as sharing injecting equipment (WHO, 2010).*

1.3.2. Measuring quality:

Measuring quality is one of the key activities of quality assurance and it can be done by determining whether standards are being met or not (WHO, 2008). According to WHO (2010), quality of services provided in a setting is a dimension of performance of the system that delivers the particular services. So, quality of PMTCT counselling should then measure the performance of PMTCT service providers against explicit standards that define "good" PMTCT counselling processes (WHO, 2010). In this study, PMTCT counselling quality was measured against the standards described in the Zambia 2010 national protocol guidelines which were adapted from the 2010 WHO revised guidelines and recommendations for PMTCT. Key parameters looked at were counsellors' skills (including client reception and engagement, rapport, counselling practices displayed and organization in the flow of information), the content of the counselling sessions (with topics covered and accuracy of information passed on), time spent to provide the counselling, knowledge of the ANC clients about PMTCT and its related issues and client satisfaction.

1.3.3. Client satisfaction:

This was defined as the ANC attendee's perception that the PMTCT counselling sessions and services provided by the PMTCT counsellors met and/or surpassed her and partner's expectations (Lyatuu, Msamanga & Kalinga, 2008).

1.3.4. Evaluation:

This can be defined as a process that attempts to determine the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives (UNICEF, 1991). Used broadly, the term includes any effort to increase human effectiveness through systematic data-based inquiry (Rehle & Hassig, undated). Evaluation can also be defined as the episodic assessment of changes in results that can be attributed to the activities of a particular programme (WHO, 2011).

CHAPTER 2: LITERATURE REVIEW:

2.1. Introduction:

HIV testing and counselling is a pivotal component of all PMTCT programmes (WHO, 2006). For a woman who tests HIV negative in ANC, quality counselling can help her understand and maintain a safe behaviour to avoid future infection. She can also be able to breastfeed for the greatest health of the infant (UNAIDS, 2001). If the woman tests HIV positive, quality counselling may affect several other things. These include whether to benefit from antiretroviral drugs (ARVs) for PMTCT or not and understanding infant feeding options in the context of HIV (and choice of the most appropriate option for her). In addition, it may affect her personal choices regarding her sexual behaviour and future fertility among other things (UNAIDS, 2001).

Poor quality PMTCT counselling can lead to misunderstandings and potentially resistance to behaviour change by the ANC clients (Ismail & Ali, 2009). The standard of PMTCT counselling offered may also affect the uptake of HIV testing in ANC and the disclosure of HIV status to partners if the partner did not participate in the PMTCT counselling (Kadowa & Nuwaha, 2009).

2.2. PMTCT counsellors' skills:

Pregnant women and their partners are faced with a number of decisions to make in the context of HIV and AIDS. They will make good decisions and adhere to the information given through the PMTCT counselling sessions only if they are provided with quality counselling (Ismail & Ali, 2009). Therefore, counsellors need to possess effective counselling skills (Bland, Rollins, Coovadia, Coutsoudis & Newell, 2007). Interpersonal rapport established by service providers, in terms of levels of friendliness, empathy, and respect is an important component of service quality. It often determines the number of clients who get attracted to and retained in the services (Family Health International (FHI), 2006).

Good counselling skills help in preventing HIV transmission including influencing decisions on whether to undergo an HIV test or not (Bukusi, 2007). PMTCT providers

need to have, in broad terms, some basic communication skills including attending and responding skills[3] that would enable them to effectively guide and support the ANC clients and their partners (Bukusi, 2007). For instance, one study in Kenya showed that PMTCT counsellors had good engagement skills but their structuring and reacting skills needed to be improved on (Mandela et al., 2004). The study looked at determining the quality of PMTCT counselling services offered. Mandela et al. (2004) concluded that more studies on counselling skills needed to be done to enable the identification of training gaps which might need addressing in designing more focused training for PMTCT counsellors.

2.3. Content and quality of counselling:

Poor quality counselling in PMTCT has the potential to reduce the effectiveness of PMTCT programmes (Moth, Ayayo, & Kaseje, 2005 & Chopra, Jackson, Ashworth & Doherty, 2004). Providing quality of PMTCT counselling is critical as it can affect community acceptance of PMTCT services and determine whether the PMTCT programme will succeed or not (Mandela et al., 2004).

In Nyanza hospital in Kenya, Moth et al. (2005) demonstrated that the time counsellors spent on post-test counselling was generally short. This observation was shared by Huddart, Furth & Lyons (2004). Counselling services provided were found to be inadequate and that affected the utilization of the services at the hospital. This finding agrees with those of Ismail & Ali (2009) where the counselling lacked depth. Other studies have revealed that although counsellors may perform well on their social and communication skills, they may have problems with repeating or summarizing information (Delva, Mutunga, Quaghebeur & Temmerman, 2006).

Time devoted to post-test counselling has also been a concern. Moth et al. (2005) found that 89% of ANC clients received less than 10 minutes of post-test counselling. Similarly,

[3] *Attending skills refer to those skills that indicate a counsellor is actually paying attention to the client while responding skills are those demonstrated by the counsellor through communicating back to the client (Bukusi, 2007).*

Ismail & Ali (2009) found that the duration for post-test counselling was unusually short even though the basic topics were covered. This finding is consistent with what Delva et al (2006) found in their study in which limited time was allocated to attending to women receiving antenatal counselling and testing. The time was falling far short of that needed to cover the amount of health information to be given to ANC clients as part of the PMTCT services. It was obvious that the short duration of the sessions affected the depth of the topics discussed.

Besides the concern of limited time being devoted to counselling, omission of key information during counselling has been noted as a challenge in some settings. A study by Huddart, Furth & Lyons (2004) revealed a number of omissions in the pre-test and post-test PMTCT counselling sessions. The omissions were those concerned with the identification of referral needs and either providing the client with information to enable her get a referral from another source. This was similar to what was found in the Thailand VCT evaluation (Ministry of Public Health, Thailand, 2001). This implied that there was a break in the PMTCT cascade in that the women were not linked to the whole continuum of care consistently. Acceptable standards of PMTCT counselling were only observed in 22% of the pre-test and post-test counselling (Huddart et al., 2004). In addition, 74% of the PMTCT pre-test counselling sessions did not reference infant feeding.

Omissions in information passed on to clients during counselling were also noted by Rutenberg, Kankasa, Nduati, Mbori-Ngacha, Siwale & Geibel (2003) and Delva et al. (2006). According to Delva et al. (2006)'s study, crucial topics like "window period"[4], partner involvement in PMTCT and follow up support were haphazardly covered. One implication for these gaps in the PMTCT counsellors' skills is that mothers may not fully grasp the information provided during counselling in ANC. As a result, they may have difficulties making informed choices. In another study in Burkina Faso, the quality of

[4] *Window period is the period of time from when an individual is suspected to have been infected with HIV to the time when HIV antibodies can be detected by a given assay. This period varies from individual to individual, and also depends on the assay used. The mean time from exposure to the time antibodies develop is about one month. Most (95%) individuals will develop detectable antibodies by 3–4 months (WHO, 2010).*

pre-test counselling was very poor as 42% of the pregnant women did not understand the process. In addition, time for post-test counselling was mismanaged and this contributed to women not receiving their HIV test results (Sarker, Sanou, Snow, Ganame & Gondos, 2007).

Confusions on the part of the PMTCT providers with what kind of information needs to be given to HIV positive ANC clients has been demonstrated in some studies. In a study in Botswana, health care providers had different notions on what information was necessary to be given to HIV positive pregnant women during counselling (Baek, Creek, Jones, Apicella, Redner & Rutenberg, 2009). In the PMTCT counselling sessions, they observed that some specific information offered to ANC clients on PMTCT varied greatly. In most of the cases, the information was incomplete (Baek et al., 2009). Although, the majority of the women were able to recall the key topics discussed during their post-test counselling sessions, gaps were still present. In addition, only a few women were given information on what community resources for support were available just like in Huddart et al, (2004)'s study. Baek et al. (2009) recommended, among other things the standardization of post-test counselling content using job aids and the assessment of each client's understanding of essential HIV information after each counselling session. Similarly, the evaluation of voluntary counselling and testing (VCT) in the national PMTCT program in Thailand highlighted the need to have some of the content areas improved on. Certain women interviewed in ANC using semi-structured interviews indicated that they were not given sufficient information in some areas (Ministry of Public Health, Thailand, 2001). Their particular concern was with the lack of information about care following the VCT sessions. Due to inadequate information provided on some of the topics discussed during the counselling sessions, most (82%) of the seropositive women found it difficult to cope with their HIV positive results following VCT (Ministry of Public Health, Thailand, 2001). The study concluded that improving counselling and support services for HIV positive pregnant women could be critical in terms of helping pregnant women in Thailand cope better following VCT and also minimize on long term distress sometimes associated with VCT.

Other issues that have been noted as gaps during PMTCT counselling have been related to disclosure of HIV test results. In a study by Rutenberg et al. (2003), discussions about disclosure of HIV status to partners were observed in only 7 of 42 counselling sessions they observed. Furthermore, it was only in 5 of the 42 sessions where clients were asked about whether or not they had disclosed their HIV status to other family members or close friends (Rutenberg et al., 2003).

2.4. Infant feeding counselling:

Counselling on IYCF is an important component of any PMTCT programme. Implementing optimal infant feeding decisions for HIV infected mothers continues to pose challenges (WHO, 2007). Quality infant feeding counselling given to HIV positive pregnant women can enable them make the best infant feeding choices taking into consideration their local socio-economic conditions (FHI, 2003). However, studies have increasingly shown that infant feeding counselling in ANC has not met expected standards in many settings. According to Chopra and Rollins (2007), poor infant feeding counselling is a common practice in many PMTCT programmes. This leads to some mothers adopting inappropriate feeding practices, hence predisposing their infants and children to the risk of acquiring HIV infection postnatally through breastfeeding (Chopra & Rollins, 2007).

The results from a Cape Town study by Chopra and others (2004) done to assess the quality of counselling in the PMTCT programme highlighted the weakness of the country PMTCT programme. The major flaws noted in this study were in counsellors educating the women about essential conditions for safe formula feeding before an infant feeding choice was made. Chopra and others (2004) observed that there was need for the providers to pay more attention to counselling mothers particularly regarding optimal infant feeding. The depth of discussions on infant feeding options has also been a concern. In another study done to assess the infant feeding component of PMTCT programmes in four African countries, Chopra and Rollins (2007) found that in depth discussions on infant feeding options were only done in 35(5.5%) observations out of 640 PMTCT counselling sessions. The study revealed that 19(54.3%) out of the 35

observations were poor and only 11(31.1%) were said to have been good. In addition, counsellors tended to be biased toward commercial formula as their preferred option for the HIV positive women in some cases. These findings were comparable to those found the study in Kenya and Zambia by Rutenberg et al. (2003). According to Rutenberg et al. (2003), counsellors explored some and not all key issues when they discussed infant feeding with their clients. Furthermore, many of the counsellors were biased toward infant formula as the preferred option for the HIV positive women. Although formula feeding was discussed in 38 of the 42 sessions, it was only in 10 of the 42 sessions where the service providers inquired as to whether the mother had money to buy infant formula or not. In most of the sessions, the counsellors did not attempt to ascertain the clients' specific circumstances in terms of household resources despite it being an important factor to help the women determine their ability to implement the infant feeding options available. Consideration of whether the client had access to adequate supplies of water and fuel was only asked in 6 of the 42 sessions. Rutenberg et al. (2003) also found that it was only in slightly more than half of the infant feeding counselling sessions where the service providers adequately explored the feasibility and acceptability of various feeding options. According to Rutenberg et al (2003), PMTCT programmes therefore needed to intensify their efforts of providing mothers with infant feeding counselling and support. On the contrary, a study in Cameroon to evaluate the content and quality of infant feeding counselling provided to HIV positive mothers in two PMTCT sites revealed that the quality and content of infant feeding counselling was satisfactory. The counsellors were able to outline the benefits and risks of both breast and artificial milk (Njom et al., 2005). This shows that it is possible to have quality counselling provided in the context of PMTCT and hence improve the effectiveness of PMTCT programmes.

2.5. Knowledge of pregnant women about PMTCT:

Poor quality PMTCT counselling can negatively affect the knowledge ANC attendees have on PMTCT. Moth et al. (2005) demonstrated that the knowledge of MTCT and PMTCT among mothers registered for PMTCT services was inadequate even after the clients underwent counselling. The counselled women were unable to remember information given during counselling. With the global goal of eliminating MTCT,

findings such as these are worrying. In another study in Uganda where potential barriers that could affect acceptability of PMTCT interventions were assessed, Bajunirwe and Muzoora (2005) found that 12% of the mothers interviewed did not think that it was possible for an HIV positive mother to pass the HIV virus to her unborn baby. Overall, 77% of the mothers knew that MTCT was possible through breast milk while 11% felt it was not possible (Bajunirwe and Muzoora, 2005). Bajunirwe and Muzoora (2005)'s study demonstrated the existence of knowledge gaps in mothers after being provided with PMTCT counselling. All the gaps highlighted raise the concern of quality in terms of counselling provided to ANC clients in the health facilities. Antenatal attendees need a full complement of information through quality PMTCT counselling. This will ensure that they are well knowledgeable about the key aspects of PMTCT. On the contrary, good knowledge of certain aspects of PMTCT has been noted among mothers in other PMTCT programmes. For instance, Chopra et al. (2004) showed that mothers did have good knowledge of how HIV was spread and could be prevented through their rapid assessment that examined the impact of the Khayelitsha MTCT programme on infant care practices amongst programme participants and the local population.

2.6. Client satisfaction:

Measuring of client or patient satisfaction with services has become an integral part of health facility management strategies across the globe (Health Systems Trust, 2008). Client satisfaction in relation to medical care is known to be predictive of clients' decisions in relation to choices of health care plans, compliance with specific regiments and outcomes of the management (Lyatuu et al., 2008). In PMTCT programming, it is imperative that client satisfaction is assessed to ensure that high quality PMTCT services are provided.

In the evaluation of VCT in the national PMTCT programme conducted in Thailand, most women interviewed expressed satisfaction with their counselling experiences. Almost all (98%) of them indicated that they had received sufficient information to help them make a decision concerning HIV testing (Ministry of Public Health [Thailand], 2001). Satisfaction with counsellors was also noted in a study that examined the

implementation of infant feeding counselling as part of a comprehensive study to document the acceptability, operational barriers, cost and impact of pilot PMTCT services in Kenya and Zambia (Rutenberg et al., 2003). According to Rutenberg et al. (2003), almost half of the interviewed clients expressed satisfaction with the PMTCT services. They felt that they had been given the choices for infant feeding and had been helped to decide how to feed their babies.

In a cross sectional study conducted in Tanzania to assess clients' satisfaction with PMTCT services focussing on privacy, waiting time and counselling in PMTCT, it was noted that a quarter of the clients were not satisfied with some of the aspects of the services (Lyatuu et al., 2008).

2.7. Problem statement:

Results from the Zambia Prevention Care and Treatment Partnership (ZPCT)'s operational research on the effectiveness of PMTCT interventions indicate that there is significant reduction in the MTCT rate with some specific PMTCT interventions (Torpey et al, 2010). The transmission rates observed were 6.5% among infants aged 0–6 weeks when both mother and infant received interventions compared with 20.9% when no intervention was received by either the mother or the baby. By age 6–12 months, the HIV transmission rate increased from 6.5% to 15.1% and 20.9% to 39.3% (Torpey et al, 2010). In the same study, they found that prolonged breastfeeding and mixed feeding practices by HIV positive mothers increased the MTCT rate by more than double by the time the infant reached 6 to12 months of age (Torpey et al, 2010). The study did not assess the quality of PMTCT counselling offered to pregnant women. It is possible that the counselling on IYCF provided by the PMTCT counsellors may have been the main issue contributing to the increase in MTCT rate in the study. Despite these findings and the fact that the PMTCT programme has been in place for over ten years in Zambia, little information is documented and available on the quality of PMTCT counselling being provided in Zambia. Therefore, there is need for evaluation of the quality of PMTCT counselling provided to the ANC attendees in the Copperbelt province.

Literature shows that poor quality of PMTCT counselling negatively affects the effectiveness of PMTCT interventions. It is important to note that PMTCT is a process. Each stage of the process has specific interventions which must be well spelt out to ANC clients during PMTCT counselling. The WHO comprehensive strategic approach for PMTCT entails that a lot needs to be done in order to ensure effectiveness of PMTCT programmes. Therefore, counselling of ANC clients on PMTCT must be of high quality. This will enable the ANC clients make objective decisions in relation to PMTCT.

2.8. Rationale / purpose for conducting the study:

The purpose of this study was to evaluate the quality of PMTCT counselling in some government health facilities in the Copperbelt province which is mainly supported by ZPCT, a Family Health International (FHI) led partnership since 2005. Although monitoring and evaluating quality of PMTCT services is a key component of the ZPCT supported PMTCT program, there is no study that has been done to specifically focus on evaluating and documenting the quality of PMTCT counselling in the supported facilities. This study will make recommendations to the ministry of health on how to improve the quality of PMTCT counselling and hence the PMTCT program effectiveness in the province. It will also give an opportunity to the PMTCT providers to reflect on what they have been doing in terms of PMTCT service provision and identify areas requiring improving on. Other studies have shown that adequate counselling, particularly on IYCF in the context of HIV can lead to notable reductions in the MTCT rate through breast milk (Njom et al., 2004). According to the 2010 Zambia national PMTCT protocol guidelines, HIV exposed breastfeeding infants are expected to be put on Nevirapine prophylaxis from birth and continued throughout the breastfeeding period to reduce MTCT during breastfeeding. It is therefore prudent that adequate information is provided to the mothers during PMTCT counselling. Hence, it is critical that this study evaluates the quality of PMTCT counselling being provided to pregnant women during their ANC.

2.9. Study aim:

To evaluate the quality of PMTCT counselling offered to pregnant women attending antenatal care in four ZPCT supported public health facilities in the Copperbelt province of Zambia.

2.10. Specific study objectives:

i. To describe the counselling skills of the PMTCT service providers.
ii. To assess the content of the PMTCT pre-test and post-test counselling.
iii. To establish the knowledge of pregnant women about MTCT and IYCF options available to HIV positive mothers after receiving counselling on PMTCT in ANC and
iv. To evaluate the client satisfaction following PMTCT counselling.

CHAPTER 3: METHODOLOGY:

3.1. Study design:

This was a cross sectional descriptive study. Data was generated through qualitative research methods including document analysis and individual interviews using non-participant observations, client exit interviews and focus group discussions (FGDs) to collect data**.** Client exit interviews were done immediately after the mothers had undergone PMTCT counselling.

Observations of the counselling sessions helped with evaluating specific objectives 4.1 and 4.2. Objectives 4.3 and 4.4 were evaluated through the client exit interviews. The study was seeking to describe the quality of PMTCT counselling provided to antenatal attendees. The study design used was similar to that used in other studies such as those by Baek et al. (2009), Chopra and others (2004), Delva et al. (2006), Mandela et al. (2004), WHO (2006), and Huddart et al (2004).

3.2. Study setting:

The study was done in four ZPCT supported sites in Kitwe, Copperbelt province of Zambia. This province has one of the highest HIV prevalence rates in the 15 – 49 years age group in Zambia estimated to be 17% (Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc., 2009). The province is one of the most developed due to its mineral deposits (Republic of Zambia, Central Statistical Office, 2003).

Four sites were purposefully selected in Kitwe among the ZPCT supported facilities to represent the largely urban set up of the Copperbelt province. Kitwe was also chosen on the premises that it is one of the four largest cities in Zambia which are said to probably contribute significantly in terms of HIV infections in the country (UNDP, 2011, unpublished). The other three cities are Lusaka, Livingstone and Ndola.

3.3. Study sites:

i. **Facility 1:** This is a peri-urban health center serving a catchment population of about 8,489. Every month, about 20 new ANC clients and 20 deliveries are seen and conducted at the facility respectively.

ii. **Facility 2:** is an urban health center. It is a busy facility, serving a catchment population of about 52,000. The facility provides ANC services to over 150 new clients monthly and has an average of 180 deliveries per month.

iii. **Facility 3:** is also an urban health center serving a catchment population of 28, 526. The center receives 120 new ANC bookings per month (who are also counselled and tested for HIV) and admits about 350 pregnant women to its labour ward monthly.

iv. **Facility 4:** This urban facility serves an estimated population of 45,551. It records approximately 70 new ANC bookings weekly and conducts about 250 deliveries every month (Kitwe District Health Office, 2009).

All these facilities serve different population sizes depending on their geographical location and whether they are urban or peri-urban.

3.4. Study population:

The study population was PMTCT counsellors and ANC clients receiving PMTCT counselling services at the selected study sites. The PMTCT counsellors included both health care workers and lay counsellors.

3.5. Sampling

The study employed purposive sampling of pre-test, post-test and follow up counselling sessions for the ANC clients following group health education sessions. After post-test counselling, another purposive sample of 16 ANC attendees was selected to participate in the client exit interviews. The client exit interviews were done after obtaining consent from the ANC attendees immediately after they had received their post-test counselling. The sampling in this study was not concerned with ensuring that the findings were statistically generalized to the whole population.

3.6. Data Collection

Three data collection methods were used and these were non-participant observations, semi-structured client exit interviews and focus group discussions (FGDs). Data collection was done by the student researcher and two qualified nurse midwives trained and experienced in providing PMTCT services in May, 2011. In all the approaches, notes were written. The client exit interviews and FGDs were also tape recorded. The two qualified nurse midwives were trained and oriented in the study and data collection tools by the student researcher before starting data collection. The three study team members were all well versed with the Zambia PMTCT programme and the issues relating to PMTCT counselling. All the data collection tools were first piloted and modified after the pilot before they could be used in the study.

3.6.1. Non participant observation:

Non participant observation was used on 98 counselling sessions including pre-test, post-test and follow up counselling sessions of the pregnant women. Observation method entails data collection by vision and it is one of the oldest data collection methods (Sarantakos, 1998). Direct observation is able to help with assessing counsellors' performance as they provide their HIV counselling and testing services (Kamenga, undated). About five of the different types of counselling sessions (i.e. pre-test, post-test and follow up) with one GHE were observed at each study site. This is in conformity with the UNAIDS (2000) recommendations. The non-participant observations were done using a structured observation guide which had predetermined codes. Structured observations help when the researcher has to tell how often certain things happen besides the need to know why they happen (Saunders, Lewis, & Thornhil, 2003). From the counselling guide, quantitative measures of the counselling practices were developed. In addition, notes written during the observations complemented the data collected. The non-participant observations helped to give an indication of how often certain aspects of PMTCT counselling were being done or not by the PMTCT providers. The observation guide used in the study was adapted from the 2007 Zambian Ministry of Health National Quality Assurance Strategy for HIV counselling and testing and the UNAIDS (2000) tools for evaluating HIV voluntary counselling and testing. These were coupled with

what is expected from the 2010 Zambia national PMTCT protocol guidelines. The observation checklist had several elements which were being looked at in order to evaluate the process, content and quality of the counselling sessions and also the counsellor-counsellee interactions as suggested by UNAIDS (2000).

3.6.2. Semi-structured client exit interviews:

Semi-structured client exit interviews were done with 16 pregnant women after undergoing PMTCT counselling. A question guide was used to conduct the client exit interviews. The interviews were completely voluntary and all the clients who consented were assured of confidentiality and anonymity. A number of themes on PMTCT services were explored during the client exit interviews. These included among others, the ANC attendees' perceptions about reception provided to them by the PMTCT counsellors, space used for PMTCT counselling and what they understood as the difference between HIV and AIDS. Other themes explored were their views and understanding of partner HIV testing and disclosure of HIV test results. Modes of MTCT and how it could be avoided together with understanding of infant feeding options available to HIV positive mothers were also looked at. In addition, the study looked at the client satisfaction with the PMTCT services received. The themes were derived from the study aim and the specific objectives. The ANC clients were led through a series of pre-set questions in a private room immediately after receiving their post-test counselling based on the interview themes. The 16 client exit interviews were conducted in the language preferred by the individual clients including Bemba (the language widely spoken in the Copperbelt province), English, Nyanja and Tumbuka. The constituted study team was conversant with all the local languages the client-exit interview participants were comfortable with. The interviews were also tape recorded.

3.6.3. Focus Group Discussions (FGDs):

Data collection concluded with two focus group discussions with the service providers at two of the study sites. Participants for the FGDs were PMTCT providers at the health facilities. These included the nurse midwives and PMTCT lay counsellors. Two study sites participated in the FGDs because they were the only sites with reasonably enough

staff that could participate in the FGDs at the time due to staff shortages. One facility had nine participants in the FGD and the other had eight. The aim of the FGDs was to gain some insight into how the counsellors viewed the quality of PMTCT counselling they provided during ANC and what challenges they faced in trying to provide quality PMTCT counselling services. The purpose of the study was explained to the participants and approval letters from the Ministry of Health, local ethical review board and University of Western Cape were all shown to the facility in charges before the FGDs could be done. The FGDs were tape recorded after obtaining permission to do so from the participants. The participants were also told why the interview was going to be recorded.

3.7. Data analysis:

3.7.1. Data from non-participant observations: The structured observation guide had predetermined codes. The coding was either (1) for yes, (2) for no, (3) for not observed or (9) for not applicable. The data obtained was cleaned, entered in EPi Info and exported to the Statistical Package for Social Sciences (SPSS) for analysis. Descriptive statistics were then computed for the various variables.

3.7.2. Data from semi-structured client exit interviews and FGDs: After each FGD, the tape recorded interview was played and the notes taken during the interview were updated and completed. The FGDs were also transcribed word for word. All the real names for the health facilities were replaced with numerals i.e. facility 1 up to 4. A key was created to help with remembering how the health facilities were being represented.

All the data obtained was transcribed. Following the transcription, the data was read several times and then categorized through a step by step approach. A list of categories was created for all the questions asked during the interviews and for all the answers the 16 respondents gave in order to have a coding scheme produced before final analysis of the data. During reading of the data, words and statements that appeared to capture key thoughts or concepts were highlighted and put in categories. After categorizing the data, codes were generated depending on the categories formulated. At the beginning of the categorization, a number of categories were produced but most of them were later

merged. During this process, key quotations were being noted and underlined and were included in the write up.

3.8. Validity / reliability:

In this study, data collection was done by the student researcher and two experienced nurse midwives who were also PMTCT counsellors. They were all well versed with PMTCT issues in Zambia. Validity and reliability was enhanced by adapting the data collection tools from the Zambia Ministry of Health national quality assurance strategy for HIV counselling and testing 2007 and UNAIDS tools for evaluating PMTCT counselling. The UNAIDS tools have been tested and used in several other studies cited in the literature review. Use of different data collection methods also improved the validity and reliability of the data.

3.9. Rigour:

The study employed the use of non-participant observations, semi-structured interviews and focus group discussions to increase rigour. The nurse midwives used were also trained and oriented to the data collection tools. In addition, the data collection tools that were used are tested tools based on the UNAIDS tools for evaluating PMTCT and what is expected from the Zambian 2010 PMTCT national guidelines and the national quality assurance strategy for HIV counselling and testing. Awareness of reflexivity was noted and the data collectors were accountable for their actions. During data collection, relevant notes were also kept. A diary of personal thoughts and feelings was maintained throughout the research process for personal monitoring. Peer updating in the form of constant communication and contact with my supervisor was maintained throughout the study as another way of ensuring that this study would be credible. Furthermore, data was recorded using a tape recorder and a computer program was also used during the data analysis stage. All these were additional ways of achieving rigour as noted by Seale & Silverman (1997).

3.10. Ethical considerations:

Ethical approval for the study was obtained from the University of Western Cape, ERES converge (a private Zambian local ethical review board) and the ministry of health in Zambia. The health offices concerned were informed about the study upon obtaining the final approval from the ministry of health. Each participant was also fully informed about the study and participation was completely voluntary. The importance of the study in informing the ZPCT supported PMTCT programme was fully explained to all the participants. The participants were assured of confidentiality and permission was obtained from them to observe the counselling sessions. The study participants were also informed that it would not be possible to publicly identify any individual who would participate in the study or even associate them with their responses after the study. No data that personally identified individuals was collected. All eligible pregnant women were requested to sign or fingerprint a written consent form for participation during the individual pre-test and post-test counselling sessions. Before observing each session, the clients were informed about the observation and its purpose. Consent to sit in during the counselling session was then obtained from both the clients and the counsellors. The observers ensured that they were as unobtrusive as possible and that no disruptions to the counselling sessions were done. The clients were also assured of confidentiality. The observation and interview only proceeded after obtaining written consent forms from both the counsellor and the ANC clients. Each client had the right to decline participation. Clients were informed that those who did not sign or finger print the written consent forms would not be interviewed and that their refusal/inability to participate would not have any negative consequences on them. No compensation was given to participants. The importance of confidentiality was also impressed on the researchers. Data and all the documents relating to the study and including the digital voice recorder used to record some of the sessions was kept by the researcher under lock and key.

3.11. Limitations of the study:

The study was done at only four sites in the Copperbelt province with a focus on counselling during the antenatal period. Because of that, results may not be generalizable. However, the results give an indication of what the quality of PMTCT counselling is like

in some of the health facilities in the Copperbelt province. There was limited time to observe revisit PMTCT counselling sessions for most of the sites because these services are provided at different days despite having had a few clients who had come for follow up counselling at one of the sites.

Staff shortages at the health centers could not allow for focus group discussions to be done at all the study sites. For instance, health facility one had only one staff providing PMTCT services. This is a challenge of using focus group discussions with professional staff in resource constrained settings.

The Hawthorne effect[5] could have been at play. Some of PMTCT counsellors may have tried to perform at their best in terms of their counselling skills and approach considering that they were being observed. The presence of observers in the counselling rooms had potential to alter the participants' behaviours. To this effect, the participants were reassured to minimize on the pressure exerted on them because of the presence of an observer.

Observations can only be done on observable phenomena. Study results are limited to overt actions and some issues do not lend themselves to an observational analysis (e.g. personal and sensitive issues) (Sarantakos, 1998). Observational studies in general are exposed to observer bias and selective perception (Sarantakos, 1998). There are no control measures regarding bias, attitudes and opinions of the observer. The observer may also potentially misunderstand what they are observing.

[5] *A term referring to the tendency where some people work harder and perform better when they are participants in an experiment. Individuals may change their behaviour just because of attention they are receiving from a researcher rather than because of any manipulation of independent variables. By Kendra Cherry, About.com Guide.*

Reflexivity - according to feminist social scientists, a researcher's demographic and personal characteristics play some part when one is eliciting research data (Eagle, Hayes & Sibanda, 2006). In this study, awareness of reflexivity was noted and the data collectors were accountable for their actions.

CHAPTER 4: RESULTS

4.1. Counselling sessions observed:

There were 98 non-participant observations of different counselling sessions done at the four study sites as follows: 4 (4.1%) GHE, 51 (52%) pre-test, 41 (41.8%) post-test and 2 (2%) follow up counselling sessions (See table 1 below):

Table 1: Distribution of the observations:

		Facility1 (n=8)	**Facility 2 (n=30)**	**Facility 3 (n=30)**	**Facility 4 (n=30)**	**Total (n=98)**
Type of counselling session	GHE	1 (12.5%)	1 (3.3%)	1 (3.3.)	1 (3.3%)	4 (4.1%)
	Pre-test	4 (50%)	19 (63.3%)	16 (53.3%)	12 (40%)	51 (52%)
	Post-test	3 (37.5%)	9 (30%)	13 (43.3%)	16 (53.3%)	41 (41.8%)
	Follow up	0 (0%)	1 (3.3%)	0 (0%)	1 (3.3%)	2 (2%)
Type of counsellor		Midwife (1)	Midwife (1)	Midwives (2) (one student)	PMTCT Lay counsellors (2)	6 counsellors

4.2. Characteristics of the PMTCT counsellors:

Six PMTCT counsellors were observed out of which three were qualified nurse midwives, one was a student midwife on attachment and two were PMTCT lay counsellors. The qualified nurse midwives and the PMTCT lay counsellors had all been formally trained in PMTCT and had been providing PMTCT services for more than five years and one year respectively. The student nurse midwife had never been in any formal PMTCT training but had received onsite orientation and mentorship from his fellow colleagues who were formally trained in PMTCT.

4.3. Time spent on GHE:

One GHE counselling session was observed at each of the four study sites. Time spent on GHE varied among the four study sites. The minimum and maximum time taken was 28 and 95 minutes respectively with a median of 76 minutes and a mean of 68.8 minutes. Hence, the PMTCT counselling was compromised as limited information was shared during counselling.

4.4. Human resource situation:

All the facilities were constrained with human resources. For instance, GHE was conducted by the only nurse midwife available at one of the facilities while a student midwife did it at another facility. The situation was the same for the other two facilities with one of them depending on community volunteers to provide PMTCT counselling. The GHE done by the student midwife was the shortest in terms of time. On the other hand, two lay counsellors provided PMTCT counselling services at third facility. During the whole time of observations, the two lay counsellors were all by themselves without any supervision from a qualified facility nurse midwife. This was also noted from the providers during the focus group discussion. Commenting on the staffing shortages at some of the study sites during the FGD, one PMTCT provider said, *"The major difficult we face in ensuring that we provide quality PMTCT counselling is shortages of nurses especially at this facility. There are a lot of clients we see. We also attend to clients from other non-delivery health centers. Those centers refer their clients here for delivery. This adds to our workload."* These concerns were shared by another provider at a similar facility. *"I am currently the only midwife allocated to work in MNCH (Maternal Newborn and Child Health) section while the others are in the labour ward. There are some days when I am expected to be in the MNCH department while I am also alone on duty in the labour ward monitoring two or even three mothers admitted. At the same time, I would be expected to attend to the family planning clients. How can I divide myself? It just becomes very difficult to work. So, I have to depend on the lay counsellors to provide counselling and testing during ANC booking day."*

However, although lay counsellors play a significant role in providing PMTCT counselling services, they are expected to be supervised by qualified health care workers. The nurse midwife needed to have been present to answer some of the difficult questions and clarify on some of the concerns ANC attendees may have had. At the facility where lay counsellors provided PMTCT counselling, the nurse was said to have been busy in the maternity ward monitoring clients in labour. The need to have lay counsellors supervised is very important but this is a requirement and policy that is difficult to fully implement because of the serious human resource shortages in the facilities.

4.5. Infrastructure for counselling:

Space was limited for most of the facilities. As noted at one of the sites, GHE was done in a room that led to the antiretroviral therapy (ART) data clerk's office. ART clients passed through this room to get attended to by the data entry clerk. This caused distractions of the GHE and impacted negatively on the concentration of the ANC mothers and the deliberations of the sessions in general. However, the room was clean and had enough wooden benches for the ANC clients to sit on during the GHE. At another facility, the ANC mothers were gathered in an open space which was between the laboratory and the ultrasound room where the GHE was being conducted from. There were a lot of movements of people going to the laboratory and the ultrasound room, hence disturbing the GHE. The room had no privacy and the facility was quite disorganized. The space was not convenient for counselling and most of the mothers interviewed during the client exit interviews complained about it. They felt that the space used for GHE was not conducive because of the openness and small size. The room was generally clean and it also had adequate wooden benches for the clients. In general, the spaces used for GHE did not provide for much privacy.

4.6. Content of GHE:

Content of the GHE varied from one facility to another. Some of the counsellors did not make emphasis on certain key topics on PMTCT such as HIV retesting for negative clients, IYCF in the context of HIV, HIV prevention for HIV positive clients among other topics. Despite the challenge with space, there was one counsellor who presented herself well during the GHE. She had a teaching guide which she followed well with the topics logically arranged. She also engaged the clients in the discussion well and responded to their questions confidently and correctly. In addition, she made the necessary emphasis on some of the key issues in PMTCT such as the need for HIV retesting late in third trimester of pregnancy or in labour for all those mothers who test HIV negative early in pregnancy, the need to have partners involved in PMTCT services and the lack of a cure for HIV/AIDS among others. However, little was said on IYCF in the context of HIV although she needed to have done so. This counsellor had been providing PMTCT

services for about seven years and had undergone a PMTCT refresher one year and half prior to this study.

The discussion at the facility where the student midwife did the GHE had most of the topics omitted. Although he was not formally trained but oriented in PMTCT, the student midwife provided sub-standard GHE. While counsellors used teaching guides at the other facilities which helped them to be a bit more organized, the student midwife did not have the guide. It was also noted that the clients who had come at this facility on the day the observation was done were primigravidas[6] and needed more information. All these findings highlight serious gaps in the PMTCT counselling provided. For the lay counsellors, although they seemed passionate about their counselling, they tended to mix up some information on a number of topics. They also struggled to respond to some of the questions the ANC mothers asked and some explanations given were incorrect.

It was also noted through the client exit interviews that some of the mothers seemed to have been exposed to a lot of information on HIV/AIDS as was observed from the questions they asked. It is possible that the media (both print and electronic) may have contributed to exposing mothers to information on HIV/AIDS. Some mothers felt that certain counsellors lacked adequate knowledge on PMTCT because they could compare with what they heard through the electronic media. Several programs on HIV and AIDS continue to run on TVs and radios in the country. In addition, various forms of literature in different languages are being distributed on a continuous basis through different stakeholders in the national HIV and AIDS response in Zambia.

On IYCF in the context of HIV, some counsellors taught that HIV positive clients were to exclusively breastfeed for six months and then stop at that point to start replacement feeding. This does not fully conform to the national recommendations on IYCF in the context of HIV. Asked about what they felt in terms of their PMTCT counselling skills, the providers indicated that they had enough skills to enable them provide quality PMTCT services. However, they felt that they needed to be updated on new information

[6] *Women pregnant for the first time.*

in PMTCT through refresher trainings which are usually done approximately every two years and as need arises. The need for refresher training was expressed in view of the introduction of the new PMTCT guidelines in Zambia towards the end of 2010. In looking at the providers' skills and the need for refresher trainings, one counsellor had this to say, *"We have adequate skills but refresher PMTCT trainings are needed because of the changes in the PMTCT regimens every now and again. There are those of us who were trained sometime back…if you see how ARVs are given now and the time we were trained, things have changed….we have to keep reminding each other of the changes."* Table 2 below gives a summary of findings on GHE.

Table 2: Application of GHE skills:

		Facility 1 n=1	**Facility 2 n=1**	**Facility 3 n=1**	**Facility4 n=1**
		% Task performed (skill demonstrated by provider at each facility)			
2.1	Provides warm reception, greeting and introduction	100%	100%	100%	100%
2.2	Creates rapport with women in the group	100%	100%	100%	100%
2.3	Briefly discusses Malaria in pregnancy, Anaemia, STIs, to make the women understand why they are given the drugs to treat these conditions	100%	100%	100%	100%
2.4a	Explained the difference between HIV and AIDS	100%	100%	0%	100%
2.4b	Explained the major modes of HIV transmission	100%	100%	0%	0%
2.5	Effectively discusses MTCT during ANC, Labour & Delivery and post natal period	100%	100%	0%	0%
2.6	Exhibits good skills in explaining the benefits for HIV testing in pregnancy (PMTCT during ANC, Labour & Delivery & Postnatal stage)	0%	100%	0%	0%
2.7	Explains "opt out" policy correctly	100%	100%	0%	0%
2.8	Explains and assures confidentiality	100%	100%	0%	0%

The scoring was based on how many times the observed activity was conducted or not. The responses were coded as 1 = Yes; 2 = No and 9 = Not Applicable

4.7. Individual pre-test counselling:

The mean time for individual pre-test was 4.2 minutes with a minimum of 1 minute, maximum of 23 minutes and median of 3 minutes. There were 41 (83.7%) pre-test counselling sessions which took between 1 and 5 minutes to be conducted. There was one extreme observation which took 23 minutes. Ideally, each session should take about 15 – 20 minutes (Center for Disease Control (CDC), 2001). However, this seems to be a challenge with serious human resource constraints. If the human resource situation does not improve, it will be difficult to expect that the few providers available will be able to spend 15 – 20 minutes on each client. Table 3 below summarizes the content of the individual pre-test counselling.

Table 3: Content for individual pre-test counselling:

		Facility 1 N=4	**Facility 2 n=19**	**Facility 3 n=16**	**Facility 4 n=10**
		% Task performed (skill demonstrated by provider at each facility)			
3.1	Carefully explains shared confidentiality and anonymity of testing/result	0%	0%	0%	40%
3.2	Assesses client's understanding of routine HIV testing policy in pregnancy	0%	10.5%	0%	10%
3.3	Encourages and responds to client's questions and corrects misconceptions if any	50%	0%	0%	30%
3.4	Assesses existing support system	0%	0%	0%	0%
3.5	Discusses disclosure plans (including partner, family member, friend etc.)	0%	10.5%	62.5%	40%
3.6	Collects blood & conducts test unless client declines	100%	100%	100%	100%

Shared confidentiality and anonymity of test results was not explained to the clients in all the pre-test counselling observations at facilities 1, 2 and 3 while this was done in only 40% of the observations at facility 4. Assessment of clients' understanding of routine HIV testing policy in pregnancy was done in just about a quarter of the observations under this section. The effects of the results reflected in table 3 above include: possible low uptake of HIV testing because of lack of understanding by the ANC clients of routine HIV testing policy and failure by health workers to provide all the key services in terms

of HIV and AIDS because of not thoroughly discussing shared confidentiality and need for disclosure.

4.8. Content of HIV negative result post-test counselling sessions:

Table 4 below summarizes the content for HIV negative post-test counselling by facility.

Table 4: For HIV negative result post-test session:

		Facility 1 n=3	Facility 2 n=7	Facility 3 N=10	Facility 4 n=12
		% Task performed (skill demonstrated by provider at each facility)			
4.1	Greets client with respect and offers her a sit if not seated	100%	85.7%	100%	58.3%
4.2	Informs client that results are ready and establishes client readiness to receive the results. Gives results clearly and simply	100%	57.1%	90%	58.3%
4.3	Allows client to consider the result and then assess client's understanding of the meaning of the result	66.7%	71.4%	40%	33.3%
4.4	Discusses the possible window period as applicable and need for retesting	33.3%	57.1%	70%	25%
4.5	Reminds client of retesting after the window period	100%	85.7%	80%	25%
4.6	Uses open ended questions to clarify client understanding of the result	33.3%	57.1%	70%	8.3%
4.7	Identifies major areas of concern including most recent risk exposure if any and uses opportunity to encourage partner notification or referral	0%	14.3%	50%	8.3%
4.8	Gives/reinforces the message of primary prevention of HIV	0%	100%	40%	25%
4.9	Explains the risk of HIV transmission to the infant if newly infected during pregnancy or breastfeeding (if she acquires a new HIV infection during pregnancy, the risk of transmission to her baby is doubled)	0%	14.3%	50%	8.3%
4.10	Assures client that counselling will be available throughout her pregnancy	0%	0%	60%	0%
4.11	Discusses Family Planning methods that prevents HIV transmission	0%	0%	20%	0%
4.12	Allows client to ask questions and responds appropriately	66.7%	85.7%	80%	16.7%
4.13	Gives client her next appointment date	33.3%	42.9%	100%	58.3%
4.14	Thanks client for the time and attention	33.3%	71.4%	90%	33.3%
4.15	Completes record keeping	0%	28.6%	90%	91.7%

There were 25 (78.1%) post-test counselling sessions for HIV negative results done within 1 to 5 minutes time while 5 (15.6%) took 6 to 10 minutes and 2(6.3%) took 14 and 15 minutes. The mean time taken for post-test counselling for HIV negative results was 4.5 minutes with a median of 4 minutes, minimum of 1 minute and a maximum of 15 minutes. This timing impacted on the content of the counselling negatively. The sessions lacked depth and omissions of some key topics were made. This contributed to the compromise in the quality of PMTCT counselling.

4.9. Content of HIV positive result post-test counselling:

The content for HIV positive results post-test counselling sessions is shown in table 5 below. Facility 1 is not included because it did not have any HIV positive client. The mean time taken for each HIV positive post-test counselling session observed was 8.2 minutes with a median of 8 minutes, minimum of 2 minutes and maximum of 16 minutes.

Table 5: For HIV positive result post-test session:

		Facility 2 n=2	**Facility 3 n=3**	**Facility 4 n=4**
		% Task performed (skill demonstrated by provider at each facility		
5.1	Informs client that results are ready and establishes client readiness to receive the results	0%	100%	75%
5.2	Sensitively provides result in simple and neutral tone and assesses impact of result on client	50%	100%	50%
5.3	Uses open ended questions to clarify client's understanding of test result	100%	100%	0%
5.4	Discusses strategies of hope including benefits of early medical treatment (OI's, STIs, TB/PCP prophylaxis, ART)	0%	0%	0%
5.5	Identifies any immediate concerns she may have and help her deal with them	50%	33.3%	75%
5.6	Determines client's choice regarding disclosure including encouraging on partner notification and referral	50%	100%	0%
5.7	Discusses avoidance of (re) infection/risks to self and others including PMTCT	0%	66.7%	0%
5.8	Explains the risk of HIV transmission to the infant during pregnancy, labour and delivery or breastfeeding	50%	100%	50%
5.9	Explains available interventions to reduce MTCT, including ARVs and indicates clients decision to access ARVs for PMTCT	100%	100%	75%

5.10	Arranges follow up post-test session on infant feeding options and referral to additional care and support services and initiates Infant feeding counselling	0%	66.7%	50%
5.11	Provides reading materials, condoms etc.	0%	33.3%	0%
5.12	Assures client that counselling will be available throughout her pregnancy to help her plan for the future of her baby	0%	100%	0%

4.10. Content for HIV positive result follow-up post-test counselling – infant feeding and family planning:

There were 2 HIV positive clients who specifically came for follow up post-test counselling at facilities 2 and 4 as noted in table 6 below. For these two clients, the counsellors performed poorly on most of the topics under this section. The two sessions took 4 and 5 minutes to be conducted. The clients received advice on IYCF and family planning that fell far short of the expected standards. On the contrary, it is expected from the national PMTCT guidelines that ANC clients will be provided with counselling on IYCF options during PMTCT counselling. The counselling should include the health benefits and challenges of each IYCF option so that women can make informed choices.

Table 6: For positive result follow up post-test session:

		Facility 2 n=1	**Facility 4 n=1**
		% Task performed (skill demonstrated by provider at each facility)	
6.1	Greets the client with respect and asks her to take her seat if not seated	100%	100%
6.2	Describes her/his role as health educator	0%	100%
6.3	Tells client that s/he will be talking about infant feeding today	0%	0%
6.4a	Benefits and risks of exclusive breastfeeding to the baby	0%	0%
6.4b	Benefits of and risks of replacement feeding	0%	0%
6.5	Explains clearly the risks of breastfeeding by an HIV infected woman	0%	0%
6.6	Tells client about the benefits of replacement feeding	0%	0%
6.7	Explains the risks of replacement feeding	0%	0%
6.8	Discusses the dangers of mixed feeding	100%	100%
6.9	Allows client to seek clarifications and ask questions by giving client chance to summarize the main points	100%	100%

6.10	Tells client that the decision to breastfeed or not to breastfeed is entirely up to her and that her decision will be fully supported by health care workers	0%	0%
6.11	Works with client to explore if replacement feeding is 'AFASS' (Affordable, Feasible, Acceptable, Sustainable, Safely provided e.g. using cup and instead of bottles	0%	0%
6.12	Assesses if client has reached decision on whether to breastfeed or replacement feed	0%	0%
6.13	Discusses tips for good breastfeeding practices if client elects breastfeeding	0%	0%
6.14	Discusses tips for good replacement practices if client elects including cup feeding if client elects replacement feeding	0%	0%

4.11. Client exit interviews:

4.11.1. Socio-demographic characteristics of the client exit interview participants:

A total of 16 pregnant women participated in the client exit interviews. The minimum age of the participants was 18 years and maximum was 40 years. The average age was 26 years and median of 25 years. Table 7 below summarizes the socio-demographic characteristics of the 16 respondents.

Table 7: Socio-demographic characteristics of the client exit interviews participants

	Characteristic	Number of respondents
1	**Age group (in years)**	
	15 – 24	8
	25 – 34	6
	35 – 44	2
2	**Education level**	
	Primary	4
	Secondary	8
	More than secondary	4
3	**Marital status**	
	Single	2
	Married	12
	Divorced	1
	Cohabiting / living together	1
4	**HIV status**	
	Negative	14
	Positive	2

4.11.2. Knowledge of the ANC attendees about HIV/AIDS and MTCT:

a) Understanding of the difference between HIV and AIDS:

Only half of the respondents had correct understanding of the difference between HIV and AIDS despite this having been discussed at three of the study sites. Only one site did not include it in the GHE. The GHE was of compromised quality and possibly contributed to the finding. Some of the mothers seemed to understand that they could contract HIV through unprotected sex but were unable to differentiate HIV from AIDS. However, all the respondents interviewed understood the meaning of negative or positive HIV test results.

b) Understanding of MTCT and how it can be prevented:

The majority of the respondents felt that MTCT was only possible under certain circumstances. One respondent put it as follows, *"…unless when the child is being born. The infection is acquired during delivery when they (referring to midwives) do not cut properly what needs to be cut (meaning the umbilical cord)".* Some of the mothers even thought that it was completely not possible for an HIV positive woman to pass the HIV virus to her baby even though they attended the GHE. Such views are worrisome for PMTCT. A mother who has such views may as well be reluctant to take ARVs for PMTCT if she is found to be HIV positive. Although some mothers indicated that MTCT was possible, they were mixed up in their understanding. As one of them explained, *"…a baby acquires HIV at six months. That is why they say that when the baby is six months, you must stop breastfeeding".* This respondent felt that HIV transmission occurs at six months because the baby begins to have teeth at this stage and should not continue breastfeeding. There were others who felt that it could happen through breastfeeding if the mother had a sore(s) on the breast and the baby had sores in the mouth. In this study, some mothers believed that MTCT occurred if a mother had malaria in pregnancy, sexually transmitted infection (STI) or if she was not using condoms. As one respondent put it, *"If the mother has malaria or an STI, she can pass the virus to the baby."*

Out of all the 16 client exit interview participants, only one knew all the MTCT modes correctly. From the observations made, modes of MTCT were included in the GHE only

at two facilities. This was a serious gap in terms of PMTCT and reflects on the quality of PMTCT counselling. Even ANC clients from facilities that did discuss MTCT modes had difficulties remembering all the modes of MTCT. The women were not empowered with the knowledge they needed on modes of MTCT. The finding reflects on the quality of counselling being provided.

In terms of preventing MTCT, the ANC attendees interviewed displayed different levels of understanding. Nine of them said it could be avoided by giving the mother ARVs. However, among this group, some were mixed up as to when the ARVs could be taken by the HIV positive pregnant woman. In addition, some mothers believed that breastfeeding needed to be avoided completely to prevent MTCT. As one mother narrated, "*We were told not to breastfeed if you are HIV positive…You need to give other foods or bottle feeding (referring to replacement feeding)".* However, half of them said that their counsellors never mentioned anything on IYCF in the context of HIV. This was consistent with what was observed during the counselling sessions and the comments noted from the mothers on how MTCT could be prevented.

The display of knowledge on PMTCT by mothers who have undergone counselling raises the concern of quality of the PMTCT counselling. Even after counselling, some mothers still had myths and misconceptions and went back without getting clarifications from the PMTCT counsellors. Although myths and misconceptions are taught during PMTCT trainings, the providers at the observed facilities did not seem to pay attention to clearing them during their counselling.

c**) Understanding of couple counselling and testing, retesting, disclosure and their importance:**

Almost all the respondents said couple counselling and testing was very important. However, they had different views of why they felt so. Some said it was important to be educated together on HIV/AIDS with the spouse while others felt the couple needed to know their HIV status at the same time. There were also others who felt it was the only way of avoiding being cheated by the partner. They could not trust the partners to tell

them the truth on their HIV status if they tested alone. To avoid being cheated, they felt couple counselling was the best way to do it. .

On HIV retesting, most mothers interviewed said that it was necessary. However, they did not understand fully why it was necessary as one respondent commented, *"We were just told to test three times during pregnancy."* With studies showing that there is a high seroconversion rate among women during pregnancy and after delivery, it is imperative that this information be correctly given to the ANC attendees. A few of the mothers felt that there was no need for retesting especially if both partners were negative at the beginning. These findings were also consistent with the observations made during counselling because the counsellors put little emphasis on the need for retesting. In this study, all the pregnant women who came for ANC accepted to be tested for HIV and received their results. Since most of them were HIV negative, they needed to be reminded of retesting and when exactly they need3d to return to the facilities to be retested.

On disclosure of HIV test results, the majority of the interviewed mothers said that they had been told by their counsellors to go and disclose to their partners. However, they were not told how to disclose. This could explain the worry expressed by some of the HIV positive mothers. They were not exactly sure as to how they would disclose their results. Some mothers categorically indicated that they were not going to disclose for fear of negative consequences from the partners. This was a particular concern for those who had partners said to be drunkards. As one other mother commented, *"It is difficult to disclose…especially if your partner is a drunkard and you tell him your HIV positive results. He may chase you the same day. Drunkards can be a problem. They may not take the HIV test results for the wife well if they are positive."*

4.11.3: Client satisfaction with the PMTCT counselling:

Most of the respondents interviewed said they were satisfied with the PMTCT counselling services and indicated that they could recommend the same services to others. Among the clients who said so were primigravidas from one facility where the counselling had been quite disorganized and compromised. It is possible that these

primigravidas may not have been very sure of what to expect in an ideal setting or they probably were afraid to criticise the PMTCT providers and the system.

In general, the majority of the pregnant women found the PMTCT counsellors quite helpful and supportive. Some particularly felt that the counsellors had displayed good attitudes during counselling. As a result, the mothers felt comfortable with them and this enabled them to ask questions freely. *As one mother put it, "The member of staff was not rude during the teaching. She was able to ask us questions freely and also clarified issues which seemed unclear as much as possible. We were also free to ask questions."* Despite some mothers reporting having been comfortable with the PMTCT counsellors, the level of knowledge and understanding exhibited by the counsellors was a concern. "*My expectations were not fully met. It appears the counsellor did not finish teaching what she needed to teach us as far as I know. I have given birth before and I know what is expected* (one mother commented)." The expression indicated that those with previous experience seemed to expect more from the counsellors compared to primigravidas because they had some knowledge of what the counsellors needed to cover in their discussions. For PMTCT counselling to be effective, counsellors need to be well knowledgeable.

Another concern most of the interviewed clients raised related to delays in being attended to by the counsellors. A number of mothers came early to the facilities with the hope of being attended to early so that they could return to their homes early. However, they found that services started late. *"We arrived here at about 07:30 hours and we were told to wait for them (referring to the nurse midwives). Just imagine, they only started attending to us at about 09:00 hours,"* one mother complained. According to some service providers at one of the facilities, they needed to do other duties (such as getting handovers from colleagues working overnight) before they could start attending to ANC clients.

CHAPTER 5: DISCUSSION:

This chapter will discuss the key findings that were presented in the previous chapter.

5.1. Counselling skills of the PMTCT providers and space used for counselling:

Counselling skills for the PMTCT providers were generally good. All the counsellors provided good reception to the ANC clients and remained non-judgmental when counselling. They used both closed and open ended questions as needed. However, they did not consistently summarize the main issues discussed. This finding is consistent with what was noted in Mombasa where counsellors rarely repeated or summarized the information (Delva et al., 2006). In terms of actively engaging clients during GHE, this was lacking at most of the study sites, contrary to a finding in Kenya where engagement skills for PMTCT counsellors were good (Mandela et al., 2004). The differences in results with the Kenya study may need to be explored further in other to understand. There could be several factors that may lead to the differences including the differences in training packages and the way the trainings are done, human resource situation and possibly individual factors such as staff attitudes, etc.

In relation to space, the facilities had serious space constraints especially for GHE. The facilities were built many years ago at a time when their catchment populations were smaller and there were no PMTCT programmes. HIV / AIDS was not a serious public health problem as it is today. Over the years, PMTCT and other HIV / AIDS programs have been scaled up with little or no changes to the old infrastructure. Numbers of clients accessing PMTCT services have also increased over the years. Limited space is being used for several other health programs. This finding is similar to what was noted in some studies in South Africa where in some health centers, counselling rooms often served dual purposes (e.g. a storeroom and also used as a counselling room at the same time) with frequent disruptions to the counselling process (Frizelle, Solomon & Rau, 2009).

5.2. Content of the counselling sessions:

Although the PMTCT providers discussed well some of the topics during GHE, a lot of key topics were omitted. Counselling guides were not consistently used and this contributed to some counsellors omitting certain key topics on PMTCT. There is need for the counsellors to consistently use the guides to avoid omitting key topics.

Besides the omissions of some topics, some of the mothers felt that the depth of counselling was shallow. This impression was noted during the observations. For example, the counsellors at two of the facilities did not discuss the major modes of HIV transmission, MTCT during ANC, labour and delivery and postnatally and the "opt out policy". The difference between HIV and AIDS was not discussed either. The findings noted were also reflected through the limited knowledge exhibited by the ANC clients during the client exit interviews. These observations are consistent with those found in the national PMTCT programme evaluation in Thailand. They also agree with those in another study in Rwanda where topics like the "window period", discussion on the availability of ARVs as treatment and prophylaxis for PMTCT were largely omitted in the observations made (Furth, Gass and Kagubare, 2006). The omissions observed are a good indication for the PMTCT programme to do further evaluations to try and find possible reasons for such occurrences and work at addressing the gaps. The quality of training and mentorship programs may all need to be questioned among other things in an attempt to address the identified gaps.

Individual pre-test counselling sessions were conducted in a hurry and were quite short considering the amount of information needed to be provided to the women during this time. The human resource challenge seems to contribute to the scenario in a great way as staff are constrained and overburdened. The responsibilities are too many for a few providers to manage. The health system needs to prioritize addressing this challenge so that providers are able to provide quality PMTCT services. In this study, most (78%) of the HIV negative post-test counselling sessions were done within 1 to 5 minutes time. Very little of quality can be covered within such a period and that is a threat to the effectiveness of the PMTCT programme.

The average time of 8.2 minutes taken for HIV positive post-test counselling found was less than the 38 minutes average in the Mombasa study by Delva et al. (2006). However, the findings are within those of Moth et al. (2005)'s study in which 89% of study participants received less than 10 minutes of post-test counselling. On the other hand, Huddart et al. (2004)'s study revealed that counsellors spent an average of 16 minutes for HIV positive post-test counselling which was almost double the time taken in this study. The limited time spent on pre-test and post-test counselling can affect the depth of discussions conducted and hence compromise on the counselling quality. .

The PMTCT counselling displayed was below expected standards. For instance, it is expected that the HIV negative post-test counselling session should focus on health, safer sexual practices, and the high risk of transmission posed to the baby if the woman seroconverts during pregnancy or breastfeeding. In addition, re-testing after three months and towards the end of pregnancy or soon after delivery needs to be emphasized and recommended for all HIV negative mothers (MOH, 2010). This is important in view of the findings from some of the recent studies which have shown a high seroconversion rate among women during pregnancy and after delivering. MTCT rate from seroconverters has also been found to be very high (Humphrery, et al, 2010, Moodley, Esterhuizen, Pather, Chetty and Ngaleka, 2009). For instance, a study in Botswana showed that seroconversion accounted for about 43% of infant infections in 2007 (Lu et al, 2009). It is also estimated that about two thirds of MTCT arising from breastfeeding by women who seroconvert post-natally may occur while the mother is still in the "window period" of an antibody based test, when she would test HIV negative using one of these tests (Humphrey et al., 2010). All these issues were not given the attention they deserved from the counsellors.

Topics like "window period", retesting and seroconversion need to be thoroughly discussed during PMTCT counselling among other things. It is recommended that women testing HIV negative in their first or second trimesters of pregnancy in settings with

generalized HIV epidemic[7] (like in Zambia) need to return to the health facilities for another HIV test in their third trimester of pregnancy, preferably between the 28th and 36th weeks (WHO, 2010). However, if the counsellors do not emphasize this, the ANC clients may not return to the facilities as required. This would increase the risk of MTCT in the event that a mother seroconverted in the process. The importance of retesting for HIV for pregnant women who test negative early in pregnancy was not well understood by the mothers. Although the majority (75%) of them said that it was necessary to do a retest for HIV, they were unable to explain clearly why they felt so. Lack of understanding of the need for retesting could affect the number of HIV negative pregnant women who returned to the health centers for retesting. In turn, this would affect how many seroconverters or women with possible acute maternal HIV infection were identified and provided with the necessary PMTCT interventions during pregnancy.

Retesting has potential to identify seroconverters and enable PMTCT providers to institute the much needed PMTCT interventions timely and yet the counsellors did not pay much attention to it. According to Lockman (2010), if maternal HIV infection could be recognized and treated early enough in pregnancy, MTCT could be reduced to less than 2% with a combination of antiretroviral drugs given to the mother and infant coupled with avoidance of breast-feeding.

For HIV positive clients, important health promoting behaviours were also being omitted. The PMTCT counsellors did not exhibit awareness of the fact that all HIV positive ANC clients needed prevention support to reduce HIV transmission to uninfected individuals / partners and decrease their own risk of co-infection from different HIV strains or HAART resistant strains. Hence, it is imperative that strategies for HIV prevention be focussed on HIV positive clients also to minimize on the missed opportunities for HIV prevention presented to PMTCT counsellors through the ANC clients coming to the facilities.

[7] A g*eneralized HIV epidemic is where HIV is firmly established in the general population. Although subpopulations at high risk may contribute disproportionately to the spread of the HIV in the general population, sexual networking is sufficient to sustain the epidemic. Numerical proxy: HIV prevalence is consistently over 1% among pregnant women attending antenatal clinics (WHO, 2010).*

On IYCF, none of the counsellors worked with the HIV positive clients to explore if replacement feeding was Affordable, Feasible, Acceptable, Sustainable and Safe (AFASS) although some mothers could meet the AFASS criteria. The study by Rutenberg et al. (2003) observed similar findings. They found that counsellors managed to explore some and not all key issues with the clients when they looked at the infant feeding practices of mothers and infant pairs. Chopra and Rollins (2007) also noted that poor infant feeding counselling was a common finding in many PMTCT programs. According to Chopra and Rollins (2007), infant feeding issues were largely not discussed in depth with ANC mothers as noted from one study in four African countries. These observations, call for PMTCT service providers to pay more attention to the counselling of the women (Jackson, Chopra, Doherty & Ashworth, 2004).

In this study, when mothers were interviewed on what they knew about IYCF, some of them revealed that HIV positive clients should breastfeed up to six months only and stop. On the other hand, the 2010 Zambia national PMTCT protocol guidelines recommend exclusive breastfeeding for HIV positive women for the first six months of life unless exclusive replacement feeding is AFASS. After six months, appropriate complementary feeding should be introduced and breastfeeding continued for the first 12 months of life. Breastfeeding should only stop if a nutritionally adequate and safe diet without breast milk can be provided. In addition, when the decision to stop breastfeeding is made, the HIV positive mother should do so gradually within one month and everything should be taken into context. Stopping breastfeeding abruptly is not recommended. The counselling given in this study was not taking into context the socio-economic status of the mothers. Replacement feeding is able to avoid all postnatal HIV transmission but is also associated with the risks of death when given in home circumstances that are not ideal (Rollins, Becquet, Bland, Coutsoudis, Coovadia & Newell, 2008). In view of this, there is need for PMTCT counsellors to provide adequate and quality counselling on IYFC in the context of PMTCT.

All the omissions highlighted reflect a compromise in the quality of PMTCT counselling provided. This might explain why the outcomes of the PMTCT programme as highlighted in the problem statement may not be as good as expected. The findings in the study were similar to those by Sarker et al. (2007) in Burkina who found that the quality of pre-test counselling was very poor.

5.3. Pregnant women's knowledge about PMTCT

The client exit interviews revealed that only half of the respondents interviewed were able to differentiate between HIV and AIDS. Although the majority (75%) of them knew that it was possible for an HIV positive mother to transmit HIV to her baby, misunderstandings were present and most of the mothers did not know all the modes of MTCT and how to prevent it. There was only one respondent who knew all the modes of MTCT. This finding is contrary to the results found in one of the studies in Nigeria by Moses, Chama, Udo and Omotora (2009) who found a high level of knowledge on modes of MTCT by pregnant women attending ANC services at the University of Maiduguri Teaching hospital. From some studies in South Africa, mothers had low knowledge on how to prevent MTCT despite the knowledge about MTCT being relatively high (Frizelle et al., 2009). Low levels of general knowledge about MTCT and breastfeeding have also been noted in other studies in India, Zimbabwe and Nigeria (Frizelle et al., 2009) and Rwanda (Republic of Rwanda MOH, 2007).

Overall, the majority of the respondents felt satisfied with the PMTCT counselling and said they could recommend the PMTCT services at the facilities. They felt that their counsellors had been very friendly to them. This was despite the gaps noted in the quality of counselling. It is possible that there could be more reasons beyond this study that led to some mothers saying they were satisfied with the counselling services even when the quality was compromised. It is also possible that the women may not have been aware of the quality of PMTCT counselling that needed to be provided to them. Just as in the Rwanda evaluation, women reported high levels of satisfaction with their post-test counselling experiences even though accounts of those sessions suggested numerous instances of poor quality of HIV counselling at the assessed sites (Republic of Rwanda

MOH, 2007). The client satisfaction with PMTCT counselling in this study compares well with another study in Tanzania where Lyatuu et al. (2008) found a 75.2% client satisfaction level.

5.4. Human resource shortages as a barrier to providing quality PMTCT counselling:

The study revealed that staff shortages was one of the key barriers to providing quality PMTCT counselling and it needs to be addressed. The few available staff are seriously overworked and have difficulties to provide quality of PMTCT counselling as needed. The qualified nurse midwives are also leaving PMTCT lay counsellors unsupervised. If the trend continues, the effectiveness of PMTCT programmes will be affected.

Staff shortages are well known to affect the quality of care provided to pregnant women in the facilities and hence the effectiveness of PMTCT programmes (South, Ferguson, Balira, Jones & Ross, 2011). For instance, HIV counselling service uptake is known to be negatively affected by staff shortages and organization of the services at the facilities (Rutenberg, Baek, Kalibala & Rosen, 2003). According to Rutenberg et al. (2003), good counselling takes time and this demands facilities to have good staffing levels. This was not so for the facilities in this study. As Moth et al. (2005) observed, at times, counsellors handled six times the recommended number of ANC clients per day which potentially would compromise the quality of PMTCT counselling. Similar observations were made in one study in Vietnam. Heavy workload resulting from staff shortages was cited by many hospital staff as one of the main reasons why they were not able to provide good care to the clients (Nguyen, Oosterhoff, Pham, Hardon & Wright, 2009). Comments such as, *"How can I counsel all of the hundreds of women who come every day? There are many women coming here for ANC and delivery. We do not have enough staff to provide services for them"* were heard from some of the counsellors (Nguyen et al., 2009).

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS:

6.1. Conclusions:

Counsellors demonstrated good interpersonal skills although the facilities largely lacked privacy and comfort for the clients. They also provided information in simple terms despite them doing so in a hurry to finish and not actively engaging the clients in discussions. A number of omissions were noted in the content of materials covered with limited time devoted to individual pre-test and post-test counselling. This can potentially reduce the effectiveness of PMTCT programme. The depth of the discussions was shallow and this was noted from the knowledge of PMTCT issues exhibited by the women during the client exit interviews. Knowledge gaps and misunderstandings on some of the key PMTCT topics were noted among the ANC clients despite the majority of them expressing satisfaction with the counselling. PMTCT lay counsellors should not be completely left unsupervised as it was the case at one of the facilities. Partially correct information was being given out to clients at times. Staff shortages were one of the key barriers to providing quality PMTCT counselling and it needs to be addressed. Although community volunteers are doing a lot in terms of PMTCT counselling as part of the task shifting, qualified staff should not leave them completely unsupervised. In addition, if students have to help out with counselling, qualified staff need to be present so that any wrong information given out to the mothers can immediately be corrected. While the PMTCT uptake was good, the study revealed that the expected PMTCT counselling standards are not being fully met in the study sites. The findings in the study are consistent with those from other studies and call for a need to improve the quality of PMTCT counselling. For optimal effectiveness of PMTCT services, quality PMTCT counselling services need to be provided. There is need to have the ministry of health focus critically on health systems strengthening to ensure that there is provision of quality PMTCT counselling services.

6.2. Recommendations:

a. Ministry of health with its cooperating partners need to develop job aids that could have standardized pre-test and post-test counselling messages to ensure that the

counsellors provide consistent and correct information across all the PMTCT sites. In addition, counsellors should be encouraged to use teaching guides to avoid omissions.

b. The ministry of health through the district health offices needs to ensure that community volunteers are being supervised regularly.

c. The ministry of health with its cooperating partners needs to ensure that modern facilities are built or major renovations done on old ones to improve on the space in the facilities. This will help with improving on the quality of PMTCT counseling services.

d. The critical shortage of staff in the facilities is negatively affecting the quality of PMTCT counselling. It is imperative that the ministry of health prioritizes improving the staffing levels by training and employing more nurse midwives. There is need to strengthen the quality of technical assistance and mentorship provided to health facilities to ensure that there is an improvement in the quality of PMTCT counselling. Deliberate efforts are needed to monitor and evaluate regularly the quality of PMTCT counselling. This should be done by the district and provincial health offices and the cooperating partners such as ZPCT.

e. More resources need to be availed to conducting refresher trainings for the counsellors to ensure that they are up to date with the latest developments and changes in PMTCT.

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APPENDICES:

APPENDIX 1: PARTICIPANT INFORMATION SHEET

UNIVERSITY OF THE WESTERN CAPE
School of Public Health

Private Bag X17 ● **BELLVILLE** ● 7535 ● South Africa
Tel: 021- 959 2809, Fax: 021- 959 2872

Evaluation of the quality of PMTCT counselling offered to pregnant women in the Copperbelt province of Zambia:

My name is Andrew Kumwenda. I am a student studying at the School of Public Health, University of Western Cape, South Africa. I am trying to gather information on the quality of PMTCT counselling offered to pregnant women in the Copperbelt province of Zambia. The study is being done in partial fulfilment of the Master of Public Health (MPH) degree from the University of Western Cape. To participate in this study, one needs to be a counsellor providing PMTCT counselling and an ANC client counselled for PMTCT in the ANC settings. A non-participatory observation of the PMTCT counsellors and an exit interview with the pregnant women will be conducted. For your information, there are no known risks associated with participating in this study. As a participant, you may not immediately benefit from the study but the information given will help in improving the PMTCT counselling services provided. There is no compensation for participating. Participation in the study is completely voluntary. Furthermore, you do not have to answer questions you are not comfortable with, and you can choose to end the interview at any time if you wished to.

The answers you volunteer to any of the questions will be completely **confidential**. Your name will not be written on any form and none of the information you give will ever be linked back to you or anyone you mention during the interview as it will be anonymous.

It will not be possible to identify the information you give me when I write up the report. If you have any questions about the research and your participation, you can contact me on the following address: Dr. Andrew Kumwenda (Student researcher), Family Health International, P.O. Box 320303, Lusaka Mobile number: 0976553990; Email: akumwenda@fhi.org

My study supervisor is Dr. Thubelihle Mathole of the School of Public Health, University of the Western Cape, South Africa and she can be reached on the following contacts: telephone number: 002721 95929384 or c/o SOPH, Fax: 021 959 2872.

At this time, do you want to ask me anything about this study? Would you be willing to participate? If you are willing to participate, kindly read and sign the consent form.

Thank you for your cooperation.

APPENDIX 2: TRANSLATED VERSION OF THE PARTICIPANT INFORMATION SHEET

UNIVERSITY OF THE WESTERN CAPE
School of Public Health

Private Bag X17 ● **BELLVILLE** ● 7535 ● South Africa
Tel: 021- 959 2809, Fax: 021- 959 2872

Ukupituluka mufyo umulimo wakukansha palwa PMTCT uucitwa kuli bnamayo abali pabukulu kucitungu ca Copperbelt muno Zambia:

Ishina lyandi nine Andrew Kumwenda. Ndi musambi uusambilila pesukulu lyafyabumi bwacintubwingi, pa University of West Cape, South Africa. Ndeesha ukulonganya ilyashi ilya pamibele yamulimo wakukansha kwa PMTCT ukucitwa kuli banamayo abali pabukulu kucitungu ca Copperbelt mu Zambia. Aya amasambililo yalecitwa mukufikilisha lubali ukwakuba incenshi mufyabumi bwacintubwingi ukwa Master of Public Health (MPH) degree ukufuma pesukulu lya University of Western Cape .Pakubulamo ulubali, umo alekabila ukuba nikakansha mufya PMTCT, elyo umuntu waba ANC uwakanshiwa mufya PMTCT mumipekanishishe ya ANC. Ukumonakofye ukwabula ukubulamo ulubali ukwaba kakansha ba PMTCT elyo nokwipusha ukwapakufuma nabanamayo abali pabukulu kukacitwa. Ukumucinkulakofye, tamwaba ubusanso ubwaishibikwa ubwakuma ukubulamo ulubali muli aya amasambililo. Pamo nga ulebulamo ulubali, tekuti limbi munonkelemo apopenefye mumasambililo lelo ilyashi lipelwa likamwafwa ukupakamisha imikanshishe ya PMTCT iicitwa. Takwaba icishindika mukofu pamulandufye wakubulamo ulubali. Ukubulamo ulubali muli uku kusambilila kwakuipeleshafye epela. Ukulundapo, tamulingile ukwasuka ilipusho iili lyonse ilyo mushilefwaya ukwasuka elyo kuti mwasala ukuleka ukwipusha panshita iili yonse iyo mwafwaya.

Amasuko mwaipelesha ukwasuka kumepusho ayali yonse yakaba yamunkama. Ishina lyenu talyakalembwe pacipepala icili conse elyo tapali ilyashi ili lyonse ilyo mukapela ilikamubwelela ukulanga ukuti nimwe nangu uuli onse uwo mukalumbula nga bamwipusha takeshibikwe. Tekuti cicitike icakwishiba ilyashi mukampela ilyo nkalalemba report. Nganamukwata amepusho ayali yonse pali uku kufwailisha elyo nokubulamo ulubali kwenu, kuti mwantumina pali aka akeyala: Dr Andrew Kumwenda (Kafwailisha umusambi) , Family Health International, P.O. Box 320303, Lusaka Mobile number: 0976553990; Email: akumwenda@fhi.org

Kapitao mumasambililo yandi niba Dr Thubelihle Mathole abapesukulu lya Public Health, University of the Western Cape, RSA elyo kuti mwalanshanya nabo pali ishi inambala: 002721 9599384 nangu pa c/o SOPH, Fax: 021 959 2872.

Pali kano kashita, bushe kuti mwafwaya ukunjipushako icili conse ukukuma aya amasambililo? Bushe kuti mwafwaya ukubulamo ulubali? Ngakuti mwafwaya ukubulamo ulubali, Belengeni elyo nokufwatika pacipepala cakusumininapo.

Namutotela pacumfwano cenu.

APPENDIX 3: RECORD OF INFORMED CONSENT TO CONDUCT AN INTERVIEW

UNIVERSITY OF THE WESTERN CAPE
School of Public Health
Private Bag X17 ● **BELLVILLE** ● 7535 ● South Africa
Tel: 021- 959 2809, Fax: 021- 959 2872

Date of interview……..….Interviewer:…….……..……..

Place at which the interview was conducted:……..…….……...

What follows is an explanation of the purpose and process of this interview.

I am Andrew Kumwenda, a Masters of Public Health student at the SOPH, University of the Western Cape. I am accountable to Dr Thubelihle Mathole who is contactable at 002721 9599384 or c/o SOPH, Fax: 021 959 2872. As already mentioned to you, the study is being done in partial fulfillment of the Master of Public Health (MPH) degree from the University of Western Cape, South Africa. I will be interviewing pregnant women on some aspects of PMTCT after they undergo PMTCT counselling during the antenatal visits.

PMTCT providers will be observed during their counselling sessions.

At all times, I will keep the source of the information confidential. I shall keep any other records of your participation locked away at all times, and destroy them after the data has been collected. If there is anything that you would prefer not to discuss, please feel free to say so. I will not be offended and there will be no negative consequences if you would prefer not to answer a question. I would appreciate your guidance should I ask anything which you see as intrusive. The contents of the interview will be used for the purposes referred to above, but may be used for published or unpublished research at a later stage without further consent. Any change from this agreement will be renegotiated with you.

Signed by interviewer:……Signed by participant:…..……

Date:……..Place:…….

APPENDIX 4: TRANSLATED VERSION OF THE RECORD OF INFORMED CONSENT TO CONDUCT AN INTERVIEW

UNIVERSITY OF THE WESTERN CAPE
School of Public Health

Private Bag X17 ● **BELLVILLE** ● 7535 ● South Africa
Tel: 021- 959 2809, Fax: 021- 959 2872

Ubushiku bwakwipusha…….….Kepusha …….Tel:……

Incende iyabelelepo ukwipusha :…….

Natotela pakunsuminisha ukumwipushako. Icakonkapo bulondoloshi ubwa umulandu kubelele uku ukwipusha elyo nemipushishe .

Nine Andrew Kumwenda, umusambi wa Masters of Public Health uwapa SOPH, University of the Western Cape. Naba nokulondolola kuli ba Thubelihle Mathole abomwingalanshanya nabo pa 002721 9592166 or c/o SOPH, Fax: 021 959 2872. Ngefyo nandile kale, aya amasambililo yalecitwa mukufikilishako lubali ulwamasomo yakuba incenshi mufyabumi bwacintubwingi , Master of Public Health (MPH) degree ukufuma pa University of Western Cape, RSA. Nakulaipusha banamayo abali pabukulu panuma yakubakanshi mufya PMTCT ngabaya kucipimo ca antenatal.. Ababomfi bafya PMTCT bakulacecetwa panshita balekansha.

Inshita yonse, nakulasunga inkama iya ukulefuma ilyashi. Nkasunga fimbi ifyalembwa ukukuma ukubulamo ulubali kwenu munkama, elyo nokufyonaula panuma ilyashi lyonse lyalonganishiwa. Ngacakuti kuli icili conse ico mushingafwaya ukulashanyapo, napapata beni abantungwa ukulanda ico. Nshayumfwe ukubipilwa elyo tamwakatumbuke ifibi ngacakuti mwasalapo ukukanayasuka ilipusho. Nkatotela ukuntungululwa ngacakuti naipusha icili conse ico mushingafwaya ukuti njishibe. Amepusho namasuko yakabomfiwa mumilandu ilumbwilwe pamulu, lelo kuti yabomfiwa mukufwailisha

ukwakusabankanya nangu ukushili kwakusabankanya panshita imbi ukwabula ukusuminishanya nakumbi.

Ukufwatika kwakwa Kepusha:……Ukufwatika kwa uubulilemo ulubali:…..……
Ubushiku:……..Incende:……

APPENDIX 5 **UWC SR1**

UWC RESEARCH PROJECT REGISTRATION AND ETHICS CLEARANCE

UNIVERSITY *of the* WESTERN CAPE

DEPARTMENT OF RESEARCH DEVELOPMENT

APPLICATION FORM

This application will be considered by UWC Faculty Board Research and Ethics Committees, then by the UWC Senate Research Committee, which may also consult outsiders on ethics questions, or consult the UWC ethics subcommittees, before registration of the project and clearance of the ethics. No project should proceed before project registration and ethical clearance has been granted.

A. PARTICULARS OF INDIVIDUAL APPLICANT				
NAME: Andrew Kumwenda		TITLE: Dr.		
DEPARTMENT: School of Public Health Sciences		FACULTY: Community Health		
FIELD OF STUDY: Public Health				
ARE YOU: A member of UWC academic staff? A member of UWC support staff? A registered UWC student? From outside UWC, wishing to research at or with UWC?	 Yes ☐ Yes ☐ Yes ☒ Yes ☐		 No ☒ No ☒ No ☐ No ☒	

B. PARTICULARS OF PROJECT
PROJECT NUMBER: TO BE ALLOCATED BY SENATE RESEARCH COMMITTEE:
EXPECTED COMPLETION DATE: 30th June, 2011
PROJECT TITLE: Evaluation of the quality of counseling for Prevention of Mother to Child Transmission offered to pregnant women in the Copperbelt province of Zambia

THREE KEY WORDS DESCRIBING PROJECT: Evaluation, quality, PMTCT counseling
PURPOSE OF THE PROJECT: M M-DEGREE: Masters of Public Health D-DEGREE: POST GRADUATE RESEARCH:
C. PARTICULARS REGARDING PARTICULAR RESEARCHERS
FAMILY NAME: INITIALS: TITLE: PRINCIPAL RESEARCHER: OTHER RESEARCH PROJECT LEADERS: OTHER CO-RESEARCHERS: THESIS: STUDENT RESEARCHER: Kumwenda Andrew THESIS: SUPERVISOR: Dr Thubelihle Mathole

C. GENERAL INFORMATION
STUDY LEAVE TO BE TAKEN DURING PROJECT (days): Ten days
IS IT INTENDED THAT THE OUTCOME WILL BE SUBMITTED FOR PEER REVIEWED PUBLICATION? YES ☒ NO ☐
COMMENTS: DEPARTMENTAL CHAIRPERSON:

SIGNATURE OF THESIS STUDENT RESEARCHER – WHERE APPROPRIATE:

DATE: 25th November, 2011

SIGNATURE OF THESIS SUPERVISOR – WHERE APPROPRIATE:

DATE

SIGNATURE OF PRINCIPAL RESEARCHER – WHERE APPROPRIATE:

DATE:

SIGNATURE OF DEPARTMENTAL CHAIRPERSON:

DATE:

NOTE: THESE SIGNATURES IMPLY AN UNDERTAKING *BY THE RESEARCHERS*, TO CONDUCT THE RESEARCH ETHICALLY, AND AN UNDERTAKING BY THE THESIS SUPERVISOR (WHERE APPROPRIATE), AND THE DEPARTMENTAL CHAIRPERSON, TO MAINTAIN A RESPONSIBLE OVERSIGHT OVER THE ETHICAL CONDUCT OF THE RESEARCH.

E. DESCRIPTION OF PROJECT AND RESEARCH ETHICS STATEMENT

Description of Project:

The majority of children under the age of 15 years and living with HIV acquired the infection through mother to child transmission (MTCT). Prevention of mother to child transmission of HIV (PMTCT) programmes are an important intervention in maternal and child health. Zambia is one of the countries hardest hit by the HIV/AIDS epidemic and is currently in the phase of rapidly scaling up PMTCT services. For the PMTCT program to be effective, quality PMTCT counselling needs to be provided to pregnant women. The full benefits of PMTCT programmes may not be realized if the quality of counselling provided for PMTCT is compromised and poor. It is therefore critical that the quality of PMTCT counselling being provided be evaluated.

The aim of this research is to evaluate the quality of PMTCT counselling offered to pregnant women attending antenatal care. The information elicited from the study will be used to make recommendations on how to improve the effectiveness of PMTCT programme in the Copperbelt province. The study will be a descriptive cross-sectional study. The study population will be counsellors who provide PMTCT counselling and antenatal care (ANC) clients who have undergone PMTCT counselling at the selected study sites. Data will be collected using non participatory observations of the PMTCT counselling sessions and semi-structured exit interviews with antenatal

care attendees immediately after counselling. Data analysis will be done at the end of data collection. Content analysis will be used to analyze the data

Ethical approval for the study will be obtained from both the universities of Western Cape and Zambia ethics review committees and the ministry of health. In addition, each participant will be fully informed about the study and participation in the study will be completely voluntary.

Ethical Statement:

Ethical approval for the study will be obtained from both the universities of Western Cape and Zambia ethics review committees and the ministry of health. All the health offices concerned will be informed about the study upon obtaining approval from the ministry of health. Each participant will be fully informed about the study and participation in the study will be completely voluntary. The importance of the study in informing the ZPCT supported PMTCT programme will be fully explained to all the participants. The participants will be assured that confidentiality will be maintained and permission will be obtained from them to observe the counselling sessions. The study participants will also be informed that it would not be possible to publicly identify any individual who would participate in the study or even associate them with their responses after the study. No data that personally identifies individuals such as name, address, date of birth etc. will be collected. All eligible pregnant women will be requested to sign or fingerprint a written consent form for participation. The observation and interview will only proceed after obtaining written consent forms from both the counsellor and the ANC client. Each client will have the right to decline participation. Those that will not sign or finger print the written consent forms will not be interviewed. They will be thanked and encouraged to be free to continue accessing the ANC services at the health centre. They will also be informed that their refusal/inability to participant will not have any negative consequences in terms of the ANC services provided to them at the health centre. No compensation will be given to participants for participating in the study. The importance of confidentiality will also be impressed on the interviewers/observers. Data and all the documents relating to the study and cassette tapes will be kept by the researcher and locked in a cabinet.

Form issued by: Professor Renfrew Christie, UWC Dean of Research, February 2002.
(959 2949; 959 2948 secretary, 959 3170 fax, and email: rchristie@uwc.ac.za)

Appendix 6:

PPMTCT PROVIDER QUESTIONNAIRE

The questions below have been adapted from the Zambia Ministry of Health National Quality Assurance Strategy for HIV counselling and testing for 2007

Questionnaire Number _____Facility:

_____

Date: _____ **Observer:**

_____

Type of ANC visit (tick) Initia ☐ **Follow up** ☐

Type and number of PMTCT counselling sessions assessed (Tick as appropriate):
Motivational talk ____ Pre-test ___ Post-test ___ Follow up counselling ___

Q No.	SKILL	RESPONSES
PART 1: GENERAL COUNSELING SETTINGS		**Circle appropriate code: 1 = Yes; 2 = No; 9 = Not Applicable**
1.	Is there space dedicated for PMTCT counselling?	1 2 9
2.	Does the room for PMTCT counselling provide adequate auditory and visual privacy?	1 2 9
3.	Are the any IEC materials available in the room/waiting area?	1 2 9
4.	Is there enough staff allocated for PMTCT?	1 2 9
PART 2: APPLICATION OF GENERAL (GROUP) MOTIVATIONAL TALK SKILLS **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code: 1 = Yes; 2 = No; 3 = Not Observed; 9 = Not Applicable**
1	Provides warm reception, greeting and introduction	1 2 3 9
2	Creates rapport with women in a group	1 2 3 9
3	Briefly discusses Malaria in pregnancy, Anemia, STIs, to make the women understand why they are given the drugs to treat these conditions	1 2 3 9
4	Exhibits good skills in the flow of information from one subject to another without overloading women with too much information • The difference between HIV and AIDS. • Major modes of transmission	 1 2 3 9 1 2 3 9
5	Effectively discusses MTCT during ANC, Labour & Delivery and post natal period	1 2 3 9

6	Exhibits good skills in explaining the benefits for HIV testing in pregnancy (PMTCT during ANC, Labour & Delivery & Postnatal stage)	1 2 3 9
7	Explains opt out policy correctly	1 2 3 9
8	Explains and assures confidentiality	1 2 3 9
PART 3A: FOR INDIVIDUAL PRE TEST COUNSELLING ONLY **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code:** **1 = Yes; 2 = No;** **3 = Not Observed** **9 = Not Applicable;**
1	Carefully explains shared confidentiality and anonymity of testing/result	1 2 3 9
2	Assesses client's understanding of routine HIV testing policy in pregnancy	1 2 3 9
3	Encourages and responds to client's questions and corrects misconceptions if any	1 2 3 9
4	Assesses existing support system	1 2 3 9
5	Discusses disclosure plans (including partner, family member, friend etc).	1 2 3 9
6	Collects blood & conducts test unless client declines	1 2 3 9
PART 3B: FOR COUPLE PRE TEST COUNSELLING ONLY **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code:** **1 = Yes; 2 = No;** **3 = Not Observed;** **9 = Not Applicable**
1	Ensures that each couple member has given Informed Consent	1 2 3 9
2	Ensure each couple member is aware that he/she is expected to disclose their test result to their partner	1 2 3 9
3	Carefully explains shared confidentiality and anonymity of testing/result	1 2 3 9
4	Assesses client's knowledge of HIV testing policy in pregnancy	1 2 3 9
5	Encourages and responds to client's questions and corrects misconceptions if any	1 2 3 9
6	Performs risk assessment (together or separately) as appropriate	1 2 3 9
7	Assesses impact of testing on each member of the couple including MTCT and discussion of sero-discordance	1 2 3 9
8	Discusses support system	1 2 3 9
9	Invites questions and responds accordingly	1 2 3 9
PART 4A: FOR NEGATIVE HIV RESULT POST-TEST SESSIONS ONLY **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code:** **1 = Yes; 2 = No;** **3 = Not Observed;** **9=Not applicable**
1	Greets client with respect and offer her a sit if not seated	1 2 3 9
2	Informs client that results are ready and establishes client readiness to receive the results. Gives results clearly and simply	1 2 3 9
3	Allows client to consider the result and then assess client's understanding of the meaning of the result	1 2 3 9
4	Discusses the possible window period as applicable and need for retesting	1 2 3 9

5	Reminds client of retesting after the window period	1 2 3 9
6	Uses open ended questions to clarify client understanding of the result	1 2 3 9
7	Identifies major areas of concern including most recent risk exposure if any and uses opportunity to encourage partner notification or referral	1 2 3 9
8	Gives/reinforces the message of primary prevention of HIV	1 2 3 9
9	Explains the risk of HIV transmission to the infant if newly infected during pregnancy or breastfeeding (if she acquires a new HIV infection during pregnancy, the risk of transmission to her baby is doubled)	1 2 3 9
10	Assures client that counselling will be available through out her pregnancy	1 2 3 9
11	Discusses Family Planning methods that prevents HIV transmission	1 2 3 9
12	Allows client to ask questions and respond appropriately	1 2 3 9
13	Gives client her next appointment date	1 2 3 9
14	Thanks client for the time and attention	1 2 3 9
15	Completes record keeping	1 2 3 9
PART 4B: FOR POSITIVE RESULT POST-TEST SESSIONS ONLY **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code:** **1 = Yes; 2 = No;** **3 = Not Observed;** **9 = Not Applicable**
1	Informs client that results are ready and establishes client readiness to receive the results	1 2 3 9
2	Sensitively provides result in simple and neutral tone and assesses impact of result on client	1 2 3 9
3	Uses open ended questions to clarify client's understanding of test result	1 2 3 9
4	Discusses strategies of hope including benefits of early medical treatment (OI's, STIs, TB/PCP prophylaxis, ART)	1 2 3 9
5	Identifies any immediate concerns she may have and help her deal with them	1 2 3 9
6	Determines client's choice regarding disclosure including encouraging on partner notification and referral	1 2 3 9
7	Discusses avoidance of (re) infection/risks to self and others including PMTCT	1 2 3 9
8	Explains the risk of HIV transmission to the infant during pregnancy, labour and delivery or breastfeeding	1 2 3 9
9	Explains available interventions to reduce MTCT, including ARVs and indicates clients decision to access ARVs for PMTCT	1 2 3 9
10	Arranges follow up post- test session on infant feeding options and referral to additional care and support services and initiates Infant feeding counselling	1 2 3 9
11	Provides reading materials, condoms etc	1 2 3 9
12	Assures client that counselling will be available throughout her pregnancy to help her plan for the future of her baby	1 2 3 9
PART 4C: FOR POSITIVE RESULT FOLLOW-UP POST TEST SESSIONS – INFANT FEEDING AND FAMILY PLANNING: **Start time: _____End time: _____Minutes taken:_____**		**Circle appropriate code:** **1 = Yes; 2 = No;** **3 = Not Observed;** **9 = Not Applicable**

1.	Greets the client with respect and asks her to take her seat if not seated	1 2 3 9
2.	Describes her/his role as health educator	1 2 3 9
3.	Tells client that s/he will be talking about infant feeding today	1 2 3 9
4.	Outline the content of the counselling session including: • Benefits and risks of exclusive breastfeeding to the baby • Benefits of and risks of replacement feeding • Risks of mixed feeding	 1 2 3 9 1 2 3 9 1 2 3 9
5.	Explains clearly the benefits of exclusive breastfeeding	1 2 3 9
6.	Explains clearly the risks of breastfeeding by an HIV infected woman	1 2 3 9
7.	Tells client about the benefits of replacement feeding	1 2 3 9
8.	Explains the risks of replacement feeding	1 2 3 9
9.	Discusses the dangers of mixed feeding	1 2 3 9
10.	Allows client to seek clarifications and ask questions by giving client chance to summarize the main points	1 2 3 9
11.	Tells client that the decision to breastfeed or not to breastfeed is entirely up to her and that her decision will be fully supported by health care workers	1 2 3 9
12.	Works with client to explore if replacement feeding is 'AFASS' (Affordable, Feasible, Acceptable, Sustainable, Safely provided e.g. using cup and instead of bottles	1 2 3 9
13.	Assesses if client has reached decision on whether to breastfeed or replacement feed	1 2 3 9
14.	Discusses tips for good breastfeeding practices if client elects breastfeeding	1 2 3 9
15.	Discusses tips for good replacement practices if client elects including cup feeding if client elects replacement feeding	1 2 3 9

Additional Comments (areas of strength, weakness, etc)

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Signed: ……Date: ……