University of Malawi

Kamuzu College of Nursing

A STUDY ON QUALITY OF FOCUSED ANTENATAL CARE AT BWAILA ANTENATAL CLINIC IN LILONGWE

A RESEARCH PROPOSAL SUBMITTED TO RESEARCH AND PUBLICATION COMMITTEE (KCN) IN PARTIAL FULFILMENT FOR THE REQUIREMENT OF MASTER OF SCIENCE DEGREE IN MIDWIFERY

BY

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ABBREVIATIONS

ANC	Antenatal care
DHO	District Health Officer
DNO	District Nursing Officer
EHP	Essential Health care Package
FANC	Focused Antenatal Care
HB	Haemoglobin
HIV	Human Immuno- deficiency virus
ICPD	International Conference on Population and Development
IEC	Information, Education and Counselling
KCN	Kamuzu College of Nursing
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MDHS	Malawi Demographic and Health Survey
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality rate
MOH	Ministry of Health
PMTCT	Prevention of mother to child transmission of HIV
POW	Program of Work
RHU	Reproductive Health Unit
SP	Surphurdoxine Pyrimethamine
STI	Sexually Transmitted infection
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

EXECUTIVE SUMMARY

Antenatal care is the care that a woman receives throughout her pregnancy which helps to ensure that the woman and her newborn survive pregnancy and childbirth in good health. This care presents the first contact opportunity for the pregnant woman to connect with health services and offers an entry point for a broad range of health promotion and preventive services and integrated care which links women with pregnancy complications to a referral system. This continuity of care improves the lives of mothers and the new born babies (WHO, 2004).

Previously, antenatal care was based on the traditional approach which assumes that more visits are better in care for pregnant women and frequent routine visits are a norm where quantity of care is emphasized. Women are expected to report in early pregnancy at 12 weeks and by 40 weeks, a total of at least 12 visits would be made. A woman visits the antenatal clinic once a month for the first six months of pregnancy, once every two weeks for the next two months and once a week until delivery (MOH, 2006). During the first visit, her history is taken and risk factors are assessed. At subsequent visits, routine procedures are performed including taking blood pressure, abdominal palpation, fetal heart auscultation, examination of oedema, weighing and urinalysis. Women found to have risk factors are referred to the next level of care (WHO, 2002). This approach has been challenged over the past two decades and critiques have argued that it is not based on scientific evidence and does not meet needs of pregnant women.

World Health Organization (WHO) designed and tested a new approach to antenatal care known as focused antenatal care (FANC). This new approach to ANC emphasizes the quality of care rather than the quantity of visits. For normal pregnancies, WHO recommends four comprehensive personalized antenatal care visits with goal directed interventions that are appropriate to the gestational age and individual needs of the pregnancy proven to specifically address the most relevant health issues affecting women and their babies (WHO, 2002). The first visit is scheduled in the first trimester when gestation is less than 16 weeks, the second visit is in the second trimester between 20 to 24 weeks of gestation, third visit is scheduled in the third trimester between 28 and 32 weeks gestation and the last visit is also in the third trimester at 36 weeks gestation. Other visits are made if complications occur where follow up or referral is needed (FANC Training Manual, 2006). Malawi adopted this new approach in 2002 and no studies have been done to evaluate the quality of FANC services provided to clients.

This research is a descriptive study of the quantitative paradigm whose purpose is to assess the quality of FANC received by the clients. The study will explore the quality of physical plant and supplies, comprehensive history taking, observations and clinical investigations, physical and obstetrical examination, drug administration and immunization, management of obstetric complications and client education and counselling during FANC consultation.

The study will be conducted at Lilongwe District Health Office, Bwaila antenatal clinic. The target population for this study include both primgravid and multigravid antenatal clients attending their second, third or fourth visit. According to Lemeshow, Hosmer Klar & Lwanga (1990), a formula will be used to determine the sample size. The sample size has been

calculated from the total number of deliveries and the total number of antenatal attendance for Bwaila for 2008.

The formula: $n = \frac{Z^2 P(1-P)}{E^2}$: Sample size = 360 antenatal mothers

Convenience or accidental sampling will be used where the most readily available subjects from Bwaila antenatal clinic will be used for the study (Polit & Hungler, 1989). Data will be collected by using a structured questionnaire and a checklist for FANC based on performance standards for RH in Malawi quality of FANC (See Appendix A). A structured questionnaire derived from the observation checklist will also be used to conduct an exit interview with the pregnant woman on the perceived quality of the FANC received according to the set guidelines (See Appendix B). This questionnaire has been translated into Chichewa language for easy understanding and communication with the participants (See Appendix C).

The data will be analysed by using descriptive statistics. Frequencies, means and percentages will be used to draw up conclusion of the study. Statistical package for social scientist (SPSS) will be used to analyze quantitative data on a computer. This analysis will help to correct identified deficiencies and formulate intervention strategies that will improve provision of quality antenatal care.

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1.0 INTRODUCTION

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to both their health and well being and that of their infants (MICS, 2008). During this period the midwife provides antenatal care services with the aim of providing quality care to pregnant women by monitoring the growth and development of the fetus in relation to the mother's health to ensure that the woman and her newborn survive pregnancy and childbirth in good health (WHO &UNICEF, 2003).

Worldwide, antenatal care was previously based on the traditional approach where pregnant women had no limit to antenatal care visits. These women were expected to report for antenatal care early at 12 weeks and would make at least twelve visits to the clinic during pregnancy (WHO, 2002). The timing of the visits for the traditional regime was monthly from the booking visit to 28 weeks, fortnightly to 36 weeks and then weekly until delivery. Malawi has been using this type of approach for decades. This approach has been challenged over the past two decades and recent evidence has led to the understanding that in a normal pregnancy, a woman does not need to make so many antenatal visits (WHO &UNICEF, 2003).

Based on the review of the effectiveness of different models of antenatal care, the World Health Organization (WHO) designed and tested a new approach to antenatal care known as focused antenatal care (FANC). In 2001, the WHO issued guidance on the new model of antenatal care for implementation in both developed and developing countries (WHO, 2002). For normal pregnancies, WHO recommends four antenatal care visits with goal directed interventions that are appropriate to the gestational age and individual needs of the pregnancy

proven to specifically address the most relevant health issues affecting women and their babies.

FANC encourages health promotion and disease prevention activities which include vital health care messages such as required antenatal visits, essential services, danger signs (how to recognize danger signs and where to get help) good nutrition, importance of rest, breastfeeding, family planning and risks of using tobacco, alcohol, local drugs and traditional remedies and birth preparedness. Complication readiness and planning for a skilled attendant at birth, clean and safe delivery , place of birth, how to get there, items for birth, potential blood donors, coping with emergencies, newborn care and support during and after birth are also included in FANC (FANC Training Manual, 2006). The first visit is scheduled in the first trimester when gestation is less than 16 weeks. The early initiation of ANC is important for early identification, prevention and treatment of complications. The second visit takes place in the second trimester between 20 to 24 weeks of gestation, third visit is scheduled in the third trimester between 28 and 32 weeks gestation and the last visit is also in the third trimester at 36 weeks gestation. The targeted visits indicate how each of these interventions will help to prevent maternal mortality. Other visits are made if complications occur where follow up or referral is needed (FANC Training Manual, 2006).

According to Malawi Demographic and Health Survey (MDHS) 2004, for 57% of births in Malawi, mothers meet the recommended number of four focused antenatal care visits. This means that since the introduction of the FANC in Malawi in 2002, 43% of mothers who give birth do not meet the recommended four visits and therefore miss out on the specific interventions targeted for those visits and this can consequently affect the outcome of pregnancy. It is essential in this respect to ensure quality of ANC for each visit so that

services provided contribute to improved maternal health (UNICEF, 2008). Only 8% of women initiate ANC in the first trimester which indicates that a large proportion of pregnant women in Malawi miss out on the intended benefits of early antenatal care services which include early detection and treatment of malaria, anaemia, pregnancy induced hypertension and syphilis which are prevalent and have an impact on maternal and neonatal health (MICS, 2008). This therefore poses a challenge to Malawian women because they report to the antenatal clinic when complications have already occurred and this contributes to the high maternal mortality rate which is currently estimated at 807 per 100,000 live births (MICS, 2008).

Malaria in pregnancy increases the chance of maternal anaemia, abortion, stillbirth, prematurity, intrauterine growth retardation and infant low birth weight (Steketee, Nahlen, Parise & Menendez 2001). Treatment of syphilis during pregnancy is another intervention which has proven to be effective in reducing perinatal mortality. Maternal fetal transmission of syphilis may be as high as 80% and syphilis testing and treatment during antenatal period has proven to prevent still births in most women (Holtzth et al. 2004). In addition, tetanus infections cause about 30,000 maternal deaths globally each year and therefore tetanus immunization during pregnancy can be life saving to women (Bennet, 2000).

Most recently, the antenatal period act as an entry point for HIV prevention and care. Most complications of both early and late pregnancy occur more often in women infected with HIV (Mclyer, 1999). Examples of HIV related complications in HIV positive pregnant women are spontaneous abortion, ectopic pregnancy, preterm labor, and postpartum infections. HIV positive women access care (getting antiretroviral drugs, nutritional counselling and support to prevent the complications during antenatal period. Furthermore, services on prevention of

HIV transmission from mother to child (PMTCT) are offered during antenatal period. Mother to child transmission of HIV (MTCT) is by far largest source of HIV infection in children below the age of five years. In absence of any intervention, rates of MTCT of HIV vary from 15-30% without breast feeding and can reach as high as 30-45% with prolonged breast feeding (Mclyer, 1999).

Quality of ANC has been designated one of the four pillars of Safe Motherhood along with clean and safe delivery, essential obstetric care and family planning which could contribute to reduction in maternal mortality since quality of ANC is an effective route to emergency obstertic care and skilled delivery (Carroli et al. 2000). The concept of quality of care is recognized as a key element in the provision of health care because it links the outcome of care with the effectiveness, compliance and continuity of care (Fawole, Okunlola & Adekunle, 2008). The goal of focused antenatal care is to promote maternal and newborn health and survival through targeted assessment of pregnant women to ensure a normal child bearing cycle and new born period and to facilitate early detection and treatment of problems and complications, prevention of complications and diseases, birth preparedness and complication readiness planning and health promotion (WHO, 2002).

In response to the evidence of effectiveness of FANC, several countries in Sub-Saharan Africa moved to adapt the new approach as a way of promoting the health and survival of mothers and babies. In Malawi, since the International Conference on Population and Development (ICPD) in 1994, several strategies have been put in place to reduce MMR. The Ministry of health (MoH) through Reproductive Health Unit (RHU) developed the Reproductive Health Policy in 2002, the integrated performance standards for reproductive health in 2004, the Essential Health package (EHP) 2004 and the Road Map in 2006 in

which the main emphasis is to improve the quality of maternal services. However, a few and very limited interventions have paid attention on ANC. Most interventions have concentrated on the quality of direct causes of maternal deaths, that is, labour and delivery and perinatal periods. Considering the high maternal deaths in Malawi and high numbers of women delivering under non-skilled care, one would question the quality of ANC women receive.

Malawi adopted the new WHO approach to antenatal care in 2002. A training manual for the health care providers on focused antenatal care and prevention of malaria during pregnancy was published in 2006 by the National Malaria Control Program in Lilongwe (MOH, 2006). Although Antenatal care coverage is high in Malawi, worrying gaps exist in terms of its quality and ability to prevent, diagnose or treat complications. According to MICS (2008), there is limited content of ANC services in Malawi which indicates that women are not getting the care that would assist in the identification and management of complications that can have a negative impact on the mother and her baby. Benefits of ANC in influencing outcomes of pregnancy depend to a large extent on the content and quality of services provided therefore improving maternal and newborn health requires strengthening of existing evidence based interventions in ANC.

Since the introduction of FANC in Malawi, several studies have been conducted but there is not much known about the quality of FANC received by clients. This study is designed to assess the quality of FANC received by pregnant women at Bwaila antenatal clinic using their assessment of physical plant and supplies, comprehensive history taking, observations and clinical investigations, physical and obstetrical examination, drug administration and immunization, management of obstetric emergencies and client education and counselling.

2.0 PROBLEM STATEMENT

Many women in Malawi are dying from complications of pregnancy and child birth. The maternal mortality ratio is estimated at 807 per 100, 000 live births (MICS, 2008). Pregnancy itself is always a risk to the mother because there are many complications that can occur (Lindroos & Luukkainen, 2004). Some of these problems can be noticed during antenatal care before they become life threatening. ANC is therefore essential in increasing the mother's chances to stay alive and give birth to a healthy baby. ANC has great potential in detecting and treating existing diseases early, recognising mothers at risk and signs of danger in time so that pregnancy complications can be prevented (Lindroos & Luukkainen, 2004).

Analyzing the quality of care for clients and communities is very crucial because quality care is something that meets their perceived needs (Brawley, 2000). Quality of antenatal care is a strong influencing factor in determining whether a person seeks medical advice, complies with treatments and maintains a relationship with the provider or health facility. Ultimately the dimensions of quality of antenatal care affect the health and well being of the mother and the baby. Therefore assessing quality of FANC services is too important to neglect because quality FANC can potentially improve maternal outcomes of pregnancy and have a tremendous impact on the future health of Malawian mothers and children (Brawley, 2000). It is therefore imperative to undertake studies to assess the quality of FANC clients receive in order to identify gaps and develop strategies for improving maternal and child health in Malawi.

3.0 SIGNIFICANCE OF THE STUDY

High quality antenatal care is one of the service interventions that can potentially impact on the high maternal and neonatal mortality. Attending ANC is one of the promotive and preventive strategies through which women are empowered to take responsibility for their health and the health of their babies. If these women received quality antenatal care services, a valuable contribution would be made towards the health of the mother and the baby and ultimately the outcome of pregnancy (Fawole, Okunlola & Adekunle, 2008).

Although studies of ANC have been carried out in Malawi, there is little information on quality of FANC. Knowledge on quality of FANC in Malawi is needed to correct identified deficiencies and formulate intervention strategies that will improve provision of quality antenatal care (Fawole, Okunlola & Adekunle, 2008). Assessing quality of FANC will strongly influence acceptance and sustained utilization as well as compliance and ultimately the outcome of care thereby helping in the reduction of maternal and child morbidity and mortality due to complications of pregnancy and child birth (Fawole, Okunlola & Adekunle, 2008). The results of the study will help to correct identified deficiencies in the provision of FANC and formulate intervention strategies that will improve provision of quality antenatal care which will ultimately improve maternal and child health outcomes. On academic grounds, the results of the study will provide new knowledge on quality of focused antenatal care.

4.0 MAIN OBJECTIVE

The main objective of the study is to assess the quality of focused antenatal care at Bwaila antenatal clinic in Lilongwe District.

4.1 SPECIFIC OBJECTIVES

- To explore client's views on the quality of services provided during FANC consultation (focusing on Physical plant and supplies, comprehensive history taking, observations and clinical investigations, physical and obstetric examination, drug administration and immunization and client education and counselling).
- To explore client's views on client-provider relationship during antenatal care consultation
- To identify health facility factors that contribute to provision of quality FANC services as perceived by the client (focusing on time spent with provider, waiting time, equipment, drugs and supplies).

5.0 OPERATIONAL DEFINITIONS OF KEY CONCEPTS

Antenatal care

Care that a woman receives throughout her pregnancy at a health facility

Focused Antenatal Care

Targeted assessment of the pregnant woman done in four visits that addresses the priority health needs of the mother and baby

Quality health care

The degree to which health services for individuals and the population increase the likelihood of desired health outcomes consistent with current standards and professional knowledge

Client

Pregnant woman attending antenatal care

Health care providers

Nurse midwives, clinical officers and doctors providing FANC.

Client perception of Quality antenatal care

Pregnant woman's interpretation of antenatal care experience

Services provided to the client during FANC consultation

Comprehensive history taking, physical and obstetrical examination, laboratory investigations, drugs and immunization and client education and counselling.

Health Facility

Antenatal care clinics offering FANC

Counselling

One to one interaction between the provider and the client where there's information exchange and health education on antenatal care

Skilled worker

Trained health worker attending to pregnant women

6.0 LITERATURE REVIEW

In Malawi there is little published literature available in relation to quality of focused antenatal care. But there is an extensive amount of literature from industrialized and developing countries on the quality of FANC and its association with perinatal and maternal outcomes. The aim of this literature review is to learn from worldwide experience how the new FANC has improved quality of ANC. The literature review will include aspects of ANC and mortality, ANC and quality of maternal health and focused antenatal care.

6.1 ANTENATAL CARE AND MORTALITY

A report by WHO (2005) estimated that everyday 1,500 women die from pregnancy or child birth related complications and a total of 99% of all maternal deaths occur in developing countries. More than half of these deaths occur in Sub-Saharan Africa and one third in South Asia. Mothers die from a wide range of complications in pregnancy, child birth or the postpartum period. These complications develop because of their pregnancy status and the existing diseases during pregnancy. The maternal mortality rate for Malawi is estimated at 807 per 100,000 live births (MICS, 2008).

A study by Yousif & Hafeez (2006) investigated on the effect of antenatal care on the probability of neonatal survival at birth in Wad Medani Teaching Hospital in Sudan. The study was a comparative prospective cohort study that tested the hypothesis that there would be positive and established effects of each quality type of antenatal care intervention on neonatal survival at birth. A sample of 236 deliveries who received different ANC qualities constituted the sample size of the study. Data was collected using a pre-tested questionnaire, laboratory and clinical examination. Respondents were then stratified as women having good antenatal care, women having moderate antenatal care and women having no antenatal care services. All pregnancy outcomes (still and live births) were examined and then recorded together with mother's health state. The results of the study demonstrated that 45% of women received good antenatal care and only two of them had still born babies. Twenty four percent of women received moderate antenatal care and had 8 still births and 31% who received no antenatal care services ended up with 16 stillborn babies. The results suggest that women who regularly go to antenatal care institutions and have good health as well are more likely to have live births while women who had bad health and had no antenatal care services were more prone to have dead babies. Women who had good health and received no or insufficient

antenatal care services are more likely to have live births except in cases where medical problems increase their liability to have still born babies. The probability of having a live birth tends to increase with going to the ANC compared with not going to ANC.

In a similar study, Begum, Nisa & Begum (2002) conducted a retrospective analysis of maternal mortality at Ayub Teaching Hospital over a period of two years from January 2000 to December, 2001. Patients with pregnancy complications were admitted through emergency obstetric care unit. Data was collected from patients' records which included antenatal care, level of delivery care and distance from the hospital. A total of 2040 deliveries within the two years of the study were analyzed. The results of the study showed that there were 26 maternal deaths with maternal mortality ratio of 12.7 per 100, 000 live births. The major causes of the maternal mortality were haemorrhage (34.6%), hypertensive disorders (30.7%) and sepsis. These complications were attributed to poor quality of antenatal and delivery care services in the diagnosis and treatment of complications which led to the maternal deaths. The authors recommended strengthening of safe motherhood pillars of ANC and clean and safe delivery and the use of a skilled attendant to detect and treat complications early.

Another study by Sinha, (2006) explored the outcome of antenatal care, maternal deaths, early neonatal deaths and their correlation with the extent of ANC in an urban slum of Delhi in India. A total of 799 births were analyzed in terms of live births, still births, low birth weight babies, maternal deaths and early neonatal deaths. The results of the analysis demonstrated that out of 799 births, 737 clients were registered in the antenatal clinic and 19 ended up with still births giving a still birth rate of 23.78 per 1,000 live births. Out of 780 live births, 150 babies had birth weight less 2500 grams (19.2%) which was associated with 45% of early neonatal deaths. A total of 11 babies died within seven days after giving birth.

Two pregnancies ended into maternal deaths giving a maternal mortality ratio of 2.56 per 1,000 live births. The findings indicated that women who had two or more antenatal care attendance had significantly lesser number of perinatal deaths as compared to those with one or none. These results indicate the status of pregnant mothers which is the single most determinant of effectiveness of antenatal care services. The analysis demonstrated that the outcome of pregnancies in terms of prenatal deaths, low birth weight and maternal deaths improved significantly for women who had at least two or more antenatal care checkups.

Quality of ANC as a pillar of Safe Motherhood is therefore an important strategy that could contribute to reduction in maternal and neonatal mortality through early detection and treatment of pregnancy related or intercurrent illnesses. ANC also acts as an effective route to emergency obstetric care and skilled delivery which is crucial in the management of complications. Most women who receive the necessary care during antenatal period would go for emergency care when needed. Therefore ANC is an important time for reaching women with interventions and information to foster their health, well being and survival and that of their infants.

6.2 ANTENATAL CARE AND QUALITY OF MATERNAL HEALTH

Quality of maternal health consists of proper performance of interventions that are appropriate, that are known to be safe, that are affordable to the society in question and that have the ability to produce impact on mortality and morbidity in accordance with established standards (Prakash, 2009). ANC is generally aimed at ensuring a healthy mother and a healthy baby at the end of pregnancy. To provide quality ANC, the health care providers need to have adequate infrastructure, clinical skills, necessary equipment and supplies and a functional referral system where women with complications can access treatment as soon as possible. Antenatal

care is generally aimed at producing a healthy mother and a healthy baby at the end of any pregnancy. Considerable variation exists in the content and quality of ANC worldwide and this has led to the inconsistencies reported on the effectiveness of ANC on maternal health.

Osungbade, Oginini & Olumide investigated on the content of antenatal care services in secondary health care facilities in Nigeria and the implication for quality of maternal health care. This was a cross sectional descriptive study where 6 hospitals and 6 comprehensive health centres were randomly selected for the study. A sample of 390 consecutive pregnant women seen on the day of the field visit was included in the study until the required number was obtained. Antenatal care exit interview was used to obtain information on services received by the pregnant woman. Respondents were asked whether they received the following services on the day of the interview; taking history of previous and current pregnancies, blood pressure measurement, abdominal palpation and detection of fetal heart rate, health education, blood samples taken for haemoglobin and syphilis test, urine samples taken for proteinuria and bacteriuria, distribution of iron and folate supplements and malaria prophylaxis.

The results of the study demonstrated that pregnant women who booked in their third trimester had a significant higher mean number of services than those who booked in the first trimester. In both categories of health facilities, blood pressure measurement, abdominal palpation and detection of fetal heart rate services were provided to all the respondents. History of previous and current pregnancies was taken in 87%. Health education was discussed with 92.3% of the respondents. For the laboratory investigations, 42% had HB estimated, 43.1% had urine analysis for protein, 36.4% had iron and folate supplementation and 6.4% had malaria prophylaxis. These findings demonstrate that there were inadequacies

in the content of antenatal care services provided at the secondary health care facilities in the study area. The content of ANC services were deficient in capacity requirements for prevention, early detection and prompt treatment of severe anaemia, pre-eclampsia malaria in pregnancy which all significantly contribute to poor quality of maternal health care leading to maternal morbidity and mortality.

Another study by Ranu, Bonu & Harvey (2008) explored the differentials in the quality of antenatal care in India. This was a cross-sectional study that measured more than four antenatal care visits for utilization, clinical information and interpersonal quality of care. Data from a National Family Health Survey was used to analyze four south Indian States (840 women) and four north Indian States (2970). The findings indicated that the difference in the utilization of care was 82% in the north versus 26% in the south. For the quality of clinical care, 40% of women who received ANC in the North compared with 87% in the South reported their blood pressure being measured during antenatal visit, one third of women in the north had their weight taken compared with 80% in the south. Similar differences were also observed in the blood examination (40% versus 79%), and urine examination (38% versus 77%). Major deficiencies were observed in the provision of essential information in both south (44%) and north (23%). Differentials in the interpersonal quality of care were also observed in public and private sectors of both north and south India and better interpersonal quality was reported in private sector where providers were reported spending enough time during their visit. These findings showed that the percentage of women receiving four or more antenatal consultations has statistically significant positive association with all the three indices for quality of care. The results provide some idea of relative importance of clinical quality, utilization of antenatal care and interpersonal quality as significant predictor in ensuring successful maternal and child health outcomes

Similarly, a study conducted by Anya, et al. (2008) examined the provision of ANC information, education and communication in urban and rural clinics in The Gambia. A cross sectional study of 457 women (255 from urban and 202 from rural) attending antenatal clinics were enrolled in the study. The women were interviewed using modified antenatal client exit interview and antenatal record review questionnaire. Differences between women attending urban and rural clinics were assessed. The findings demonstrated that although a large proportion of women attended antenatal clinics, they were not benefiting from effective information, education and communication which together form one of the primary purposes of ANC. Ninety percent of those interviewed had attended ANC more than once and 52% four or more times. However, 70% said they spent 3 minutes or less with the ANC provider. Communicating effectively under this circumstance would be an enormous challenge and could explain the poor information exchange and provider-client interaction. In this rushed scenario, very few women asked questions during the consultation. Less than 40% could recall being informed or educated about important subjects such as danger signs of pregnancy, nutrition, birth preparedness and complication readiness. An even smaller proportion (19%) could recall being educated about what to do if there was a complication. This contributes to a failure to obtain adequate care in time and hence maternal death in The Gambia. These results demonstrate that it is obvious that women who do not have adequate and appropriate information about pregnancy and child birth would be ill equipped to make choices that would contribute to their own well being. The quality of the IEC during pregnancy ultimately affects maternal and neonatal health.

Another study by Nasar & Amjad (2007) investigated on the pattern of antenatal care to pregnant women in Pakistan and the implication for maternal health. This was a cross-

sectional study where a total of 161 women were selected from the antenatal care outpatient department visiting consecutively in the month of October, 2004. Data was collected through a pre-tested semi-structured questionnaire and a standard checklist of antenatal care based on WHO protocol for antenatal care which included maternal and child health variables and level of satisfaction about antenatal care provided.

The results of the study demonstrate that only 30% of women utilized antenatal care services. The study reported 2.5% of still births, 4% of child deaths, and 32% of abortions. The majority of women reported that they received care from a lady health visitor and very few from qualified doctors. This indicates poor quality of health care delivery since health care providers play a major role in providing health services. The findings indicated that routine antenatal investigations were provided to majority of women (urine, blood, antenatal examination and blood pressure. About 86.2% of women reported that they had to wait for more than two hours for checkups. With regards to medicine, only 37% were satisfied with medication given and 75% of women did not get tetanus toxoid vaccine. Only 31 % received information about exercise and 36% were reassured about discussing fear and anxiety about pregnancy. The poor quality of antenatal care provided contribute to poor state of maternal and child health which have an impact on maternal and newborn outcomes.

Antenatal care provided to clients should therefore be of mark to standard care and considerable resources and energies should be spent to improve the health status of mothers by providing them with good quality obstetric care.

6.3 QUALITY OF FOCUSED ANTENATAL CARE SERVICES

Provision of quality FANC services presents a unique opportunity to improve the health of women and their infants. It is therefore imperative that this opportunity is optimized by offering a full range of health promotive services and health education to pregnant women during antenatal care consultation.

Biringu & Onyango-Ouma (2006) investigated on the level of quality of care being offered to pregnant women under the FANC package in Kenya. An integrated case study design was used involving both policy and situational analysis. The study was conducted at national, district and facility levels. Nine focus group discussions comprising of 6 to 10 participants from providers, pregnant women and post-natal mothers were held in the two intervention districts. Quality of care was measured using six key components of FANC which include comprehensive history taking, detection of existing diseases and management of complications, prevention of diseases and promotion of health, planning for birth and prevention of complications and postpartum care including continuity of care. The results of the study demonstrated that the introduction of focused antenatal care had a positive effect overall on the quality of care. A highly significant effect was noted in detection of existing diseases in pregnancy during the first antenatal visit, planning for birth and prevention of complications and counselling for post partum care. No effect was found however in comprehensive history taking, prevention and promotion of disease and consultation to encourage continuity of care.

These findings slightly differ with the results of the study by Nyarko, et al. (2006) in which the effect of FANC on quality of care offered to pregnant women was explored in Ghana. The study used an integrated case study design also involving policy and situational analyses.

The assessment was conducted at national level in two regions. Short structured interviews with 58 ANC providers were done. A minimum of six client- provider interactions for each of the four recommended visits were recorded in all aspects of the quality of the FANC consultation and an exit interview was done on 341 clients. The results demonstrated that across the six key components for FANC, significant differences were only noted in the care received for prevention of diseases and promotion of health (during first, second and third visits) and encouraging continuity of care. There was no observable effect in the quality of care for comprehensive history taking, birth planning and complication readiness and post partum care.

Similarly, Mawejdeh, et al. (1995) investigated women's perspectives of the assessment of quality of care in prenatal services in Irbid, Jordan. The manner in which women assess the quality of prenatal care was studied by examining their reports on the structure and processes of care delivery as well as their satisfaction with care received. The elements that were assessed were pregnant woman-provider relationship, the technical competence of providers, information exchange, continuity and follow up measures and management. The study results showed that women were aware of the quality of care they received and demonstrated that 64% of the women reported being satisfied most of the time with the care provided. Analysis of the satisfaction of women who reported on the different elements and indicators of the quality of care showed that the majority of them were satisfied with the care they had received across all elements and indicators studied especially indicators of provider competence. However between a minimum of six and a maximum of thirty percent reported being dissatisfied to some degree with the care received. This selectivity in satisfaction may reflect many factors including women's expectations of care, previous experiences, and their perceptions of the role of the health system and their culture and values.

Another important aspect of quality FANC services is health education and counselling. The Safe Motherhood Initiative advocates the provision of advice during ANC on potential pregnancy complications and how to seek medical care for pregnant women. The educational opportunity offered in FANC cannot be ignored as a contributing strategy in reducing maternal and child morbidity and mortality.

A study by Nikiema et al. (2009) assessed the extent to which women recall receiving information about pregnancy complications in 19 countries of Sub-Saharan Africa. The results showed that there is a high level of unmet need for information on pregnancy complications in Sub-Saharan Africa. The percentage of women recalling information about potential complications of pregnancy during FANC varied widely ranging from 6% in Rwanda, 72% in Malawi and in 15 of the 19 countries, less than 50% of women reported receiving information. This indicates that providers do not routinely provide women with information and advice on pregnancy complications as part of ANC or at least information is not conveyed in a way that women remember having received it. This hinders the women's right to be knowledgeable of the potential health risks they are facing which contributes to failure to make informed decisions about their reproductive health.

Similar results were also found by Pembe, et al. (2009) where women's awareness of danger signs of obstetric complications was assessed in rural district of Tanzania. A cross-sectional study was done where a total of 1118 pregnant women were interviewed using a questionnaire. Antenatal cards were also reviewed for information on the advice given. The findings revealed that women had low awareness of dander signs of obstetric complications, 26% of women knew at least one obstetric danger sign related to pregnancy and 23% related

to delivery where 40% was related to post natal. These results suggest that although FANC advocates for individual counselling on birth preparedness and complication readiness which includes dander signs of obstetric complications, there is still low awareness and this can negatively affect the outcome of pregnancy and contribute to maternal mortality and morbidity.

Another descriptive study conducted by Both, et al. (2006) investigated how much time health workers spent on FANC services and the implications for the introduction of the new approach in Tanzania. Health workers in four dispensaries in Southern Tanzania were observed providing specific components of FANC to 28 initial clients and 43 subsequent antenatal clients. The total time of the visit was calculated as the sum of the different steps observed. Although the clients were advised to come to the clinic early in the morning, there was a considerable time lag before the actual FANC consultation started. Some clinics offered the services all day while other clinics offered the services 2 to 3 hours per working day. The results of the study demonstrated that special individual counselling was performed in 30% of the consultations. The average contact time spent with an initial client was 15 minutes and 9 minutes for a subsequent client. Specific counselling and preparation for individual birth plans did not take place at all in the subsequent clients. The major gap in the time difference was attributed to health education and counselling provided to the antenatal clients.

These findings highlight that no culture of individual counselling has been developed in Tanzania. Bearing in mind that counselling, especially the development of individual birth plan and birth preparedness is one of the major components of FANC, the findings suggest that much attention needs to be given to counselling skills and attitudes during FANC

training. Information and communication are essential elements of health care provision and the review of women's experiences of FANC services highlight their importance. The emphasis on ensuring that women are given adequate health information is one of the most promising but challenging component of the new FANC model. These results are very far from the WHO recommendations which suggest that a provider should spend 40 minutes with an initial client and 20 minutes with a subsequent client. However, the implementation of this approach requires adequate resources as identified in the WHO randomised controlled trials. The results of these studies are very interesting and could be applicable in Malawian setting because of time, workload and staff constraints which could prevent midwives and other health care providers to spend enough time with the clients in order to exchange all the necessary information needed during the antenatal period.

Another important aspect of quality in FANC is the client-provider relationship. Clients are more likely to utilize health care services where they are treated with respect and dignity. The antenatal visit is a time when very personal information is shared and is an opportunity to establish good client provider-relationship which contributes to quality of FANC services. If this relationship is poor, it affects the quality of services offered and subsequent use of antenatal services.

A study conducted by Hansen, et al. (2008) investigated the client perception of quality of primary care services in Afghanistan. This was a cross-sectional survey of outpatient health facilities, health workers and clients. A random sample of 617 health facilities implementing a basic package of health services was enrolled. In each facility, a supervisor implemented a facility assessment of infrastructure, staffing, service capacity, management processes and availability of equipment, drugs and supplies to measure perceived quality of care. Direct

observations of 5719 clients were made on client-provider interactions and exit interviews were done on 5597 clients. The results of the study demonstrated a variation specifically to the client's interaction with the health worker and not to health facility characteristics such as cleanliness, infrastructure and the presence of equipment and drugs. One third of the clients reported lack of communication and interaction with the health care provider. The client-provider relationship in all facilities lacked privacy (50%) and the women were rarely involved in discussions about their social and psychological well being. Most of the discussions with the midwife were heard clearly by all strangers in the room from behind the screen. The results of the study pinpoint that women are aware of what aspects of care matter to them, their expectations of care and how they perceive quality of services provided to them. Therefore efforts to improve client-provider interaction and communication are likely to increase client perceived quality in the antenatal care settings.

Another aspect of quality of FANC is the facility dependent characteristics which include number of antenatal care visits, waiting time and adequate essential equipment, drugs and supplies which affect health facility effectiveness as a pre-requisite for full provision of quality antenatal care services.

Langer, et al. (2002) conducted a large randomized controlled trial in antenatal clinics in Argentina, Cuba, Saudi Arabia and Thailand. The quality of FANC was investigated from the perspective of the client. The study addressed client's preferences about number of antenatal care visits, time spent in the waiting room and with the provider and amount and appropriateness of information received during the visits. A questionnaire was administered to both clients and providers. There were 800 women randomized to the new model and 800 to the standard antenatal care model.

The results of the study demonstrated that both ANC models were equally accepted by women and providers suggesting that the adoption of the new FANC model would not face major obstacles as perceived by women and providers. Overall, 77% of the women were less satisfied with the number of ANC visits, while 72% were not satisfied with the spacing between the visits. On the other hand 85% of women were satisfied with the waiting time and time spent with the provider and the information provided by the care giver about their health, tests during pregnancy and the treatment they might need. The positive impression may have resulted from an improvement in the quality of client-provider interaction.

The study findings suggest that the four visits and spacing between them are potential areas of concern for women. Providers could address these concerns by giving women information on the safety of the protocol changes. It was suggested the other needs which worked as incentives for women to attend ANC such as socialization and social support could be addressed through other activities that do not necessarily involve formal encounter with the health care providers.

Availability of resources play a bigger role in provision of quality FANC. However despite the high ANC attendance in most developing countries, a major problem hindering quality of ANC is inadequate resources is. Results of the studies conducted in Ghana and Kenya on FANC demonstrated that a focussed approach emphasizing quality of care over quantity is acceptable but difficult to implement due to scarce resources. Some components of the package were lacking in many clinics in particular procedures for disease detection including syphilis and HIV. Essential drugs and supplies were not always available. In order to provide quality ANC in line with the key components of FANC, the health care providers require the necessary material resources, drugs and equipment for maternal, new born and child survival which improve the quality of ANC and evidently reduce mortality among mothers, new born

babies and children under five years of age (MOH, POW, 2004). Provision of these pharmaceuticals and medical supplies is important because where material resources are inadequate, the health care providers cannot provide quality care to antenatal clients which predisposes women and children to high risk for maternal and child mortality.

In summary of the existing literature, antenatal care is one of the pillars of Safe Motherhood strategy developed over the past 20 years and implemented in most developed and developing countries to reduce perinatal and postnatal mortalities. Pregnant women are encouraged to seek antenatal care which is a major component of maternity care. This care is necessary since many potential problems can be identified and treated or at least anticipated prior to birth (UNICEF) Turkey, 2000). Antenatal care with a skilled attendant has great potential of recognising complications in time and initiating prompt treatment in order to save the lives of the mother and the baby. Clinical and research evidence suggest that ANC is the best preventive care medicine can offer to women to reduce morbidity and mortality in both women and their babies.

The perceived quality of services available at the antenatal clinic focus on provider competence in taking comprehensive history, conducting physical and obstetrical examination, conducting laboratory tests and giving treatment and immunizations. From the literature review, evidence to support that ANC screening and interventions are effective in reducing maternal mortality in the different studies have presented different findings on the perceived quality of services on the key elements of FANC. However, these services help the health worker to provide quality evidence based and goal oriented interventions that assist in early detection and treatment of problems and complications, prevention of complications

and diseases, birth preparedness and complication readiness and health promotion to the pregnant woman thereby reducing the risk of maternal death.

7.0 THEORETICAL FRAMEWORK

A quality framework is a tool used to facilitate the systematic analysis of the general practice environment in terms of the quality of care (Booth, Snowdon & Lees, 2005). While quality is perceived as a broad, generic sometimes subjective concept, a quality framework is more objective, applicable and measurable within a particular discipline or setting. It is an evolving entity that can be extended and improved over time and is useful as a model, a reference, a plan, a source of ideas and a bench mark to review progress and identify positive high quality and gaps in service (Booth, Snowdon & Lees, 2005).

The concept of quality of care provides a point of reference on the content of the services provided and how those services address the needs of those who seek them. FANC is centred on ensuring, supporting, and maintaining maternal and fetal wellbeing throughout normal pregnancy and childbirth (MOH, 2006). This particular study will utilize the Donabedian theoretical framework on quality of health care (Donabedian, 1980). The assessment of the quality of services defined in this framework is the elements client's themselves experience as being critical. The framework consists of three components; structure, process and outcome. Structure examines the characteristics of the setting in which the care is provided, process examines what is done in giving and receiving care and outcome examines the effects of care on the health status and welfare of individuals and populations (Baker, 2006).

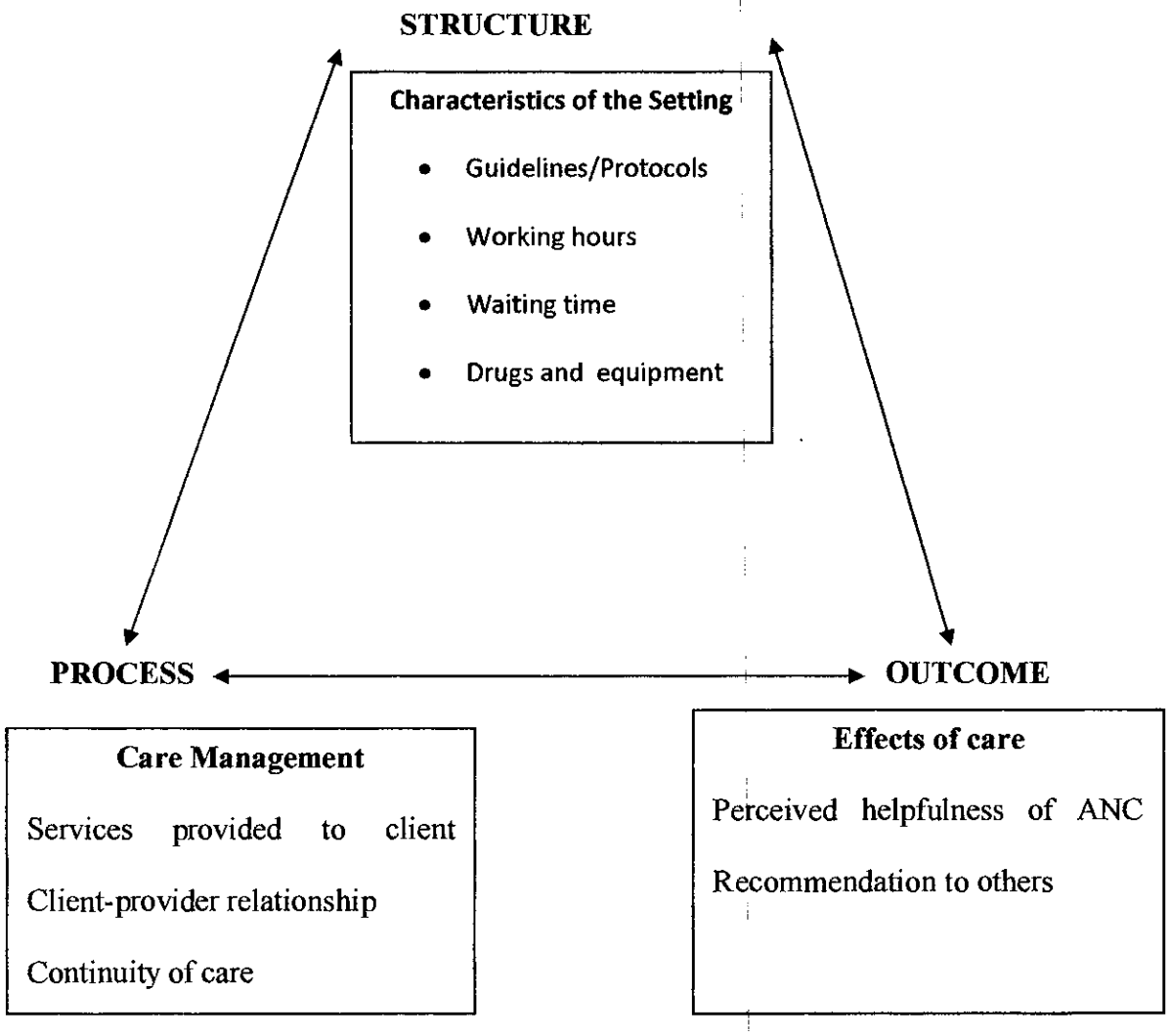

FIGURE 1: MODIFIED DONABEDIAN THEORETICAL FRAMEWORK ON QUALITY OF HEALTH CARE

7.1 STRUCTURE

Structure refers to attributes of material resources available to provide health care. Donabedian believed strongly in the importance of health care structure, seeing it as a driving force for later care (Maclaughlin & Kaluzny, 1999). Structural elements are needed as standards to ensure an environment in which good care is possible and helps to define aspects of quality for which the measures and standards can be developed (Maclaughlin & Kaluzny, 1999). The components of structure which are discussed in this modified framework are

guidelines and or protocols, waiting time, working hours, drugs and equipment for the provision of quality antenatal care.

In view of the new approach to ANC, the MOH in collaboration with other organizations designed a training manual on FANC and prevention of malaria during pregnancy. This manual is a resource for health workers providing FANC so that they are equipped with the relevant knowledge, attitude and skills to provide evidence based, goal oriented interventions that are appropriate to the gestational age of pregnancy and address the most prevalent health issues affecting women and newborns (MOH, 2006). The manual provides a FANC matrix with components of the targeted FANC visits to guide in the provision of quality FANC which ultimately improves pregnancy outcomes.

In order to provide quality ANC in line with the key components of FANC, the health care providers require the necessary material resources, drugs and equipment for maternal, new born and child survival which improve the quality of ANC and evidently reduce mortality among mothers, new born babies and children under five years of age (MOH, POW, 2004). Provision of these pharmaceuticals and medical supplies is important because where material resources are inadequate, the health care providers cannot provide quality care to antenatal clients which predisposes women and children to high risk for maternal and child mortality.

The Reproductive Health Unit (RHU) is responsible for ensuring procurement and adequate stocks of supplies, equipment and drugs for reproductive health services including antenatal care. But steady supply of drugs and material resources is problematic because of depending on imported drugs and equipment for the health services. Due to the rising cost of these items and the deteriorating reserves of foreign exchange, there are acute shortages of having to do

without supplies for many health care activities due to in adequate funding and this contributes to provision of poor quality care which affects the outcome of pregnancy (MOH Midyear Report, 2007).

Sometimes shortages derive from the lack of systems to ensure that existing stocks are distributed in response to routine reporting of health facility needs. In some instances supplies are not attributed to lack of resources but rather inadequate mechanism for resupply. This therefore poses a risk to pregnant women who cannot receive essential obstetric care due to shortage or in availability of basic drugs for life saving. Procurement of appropriate equipment to deliver quality ANC services at all levels of the health care system is very vital for better monitoring of pregnant women.

According to personal experience of the author, a normal antenatal clinic in Malawi has over 50 clients with one or two midwives running the whole clinic. Clients report to the ANC as early as 6 o'clock in the morning but there is a time lag before the antenatal care consultations start. The providers start operating the clinics around nine o'clock and do not make efforts to reduce waiting time, instead they rush through the clinic so that by 2pm, the clinic is over. Worse still, clients who come later than 12 mid-day are turned away because the clinics are through by 2pm. This practice compromises quality of care of pregnant women and subsequently affects the outcome of pregnancy.

7.2 PROCESS

This refers to what is done in giving and receiving care and the extent to which professionals perform according to accepted standards. Process measures are used to determine whether the

professional has performed adequately for those conditions where there is substantial agreement on what constitutes care and where the technology is reasonably effective (Maclaughlin & Kaluzny, 1999). Although performance of the professional is more corelated with better outcomes, the outcomes are not solely determined by professional performance. According to the standards for FANC, there is a procedure for comprehensive history taking, diagnostic plan which include observations, clinical investigations and physical and obstetrical examination, treatment plan which include drug administration and immunization and educational plan which involves client education and counselling (Maclaughlin & Kaluzny, 1999).

Through these plans, the provider carries out specific interventions such as conducting physical and obstetrical examinations and laboratory investigations which help to detect and treat existing diseases early and manage conditions such as malaria, severe anaemia, pre-eclampsia and eclampsia, HIV and AIDS and sexually transmitted infections which have a direct bearing on maternal mortality and morbidity in Malawi (MOH, 2006). The interventions proven to be effective in reducing maternal and newborn morbidity and mortality include giving Tetanus Toxoid immunization to prevent tetanus, giving iron/folate supplementation to prevent iron deficiency anaemia, Intermittent presumptive treatment for malaria prevention, HIV testing and counselling and VDRL testing (MOH, 2006).

Just as important as the range of available services is the quality of client-provider interaction and information given to the antenatal clients. Adequate information increases access to antenatal care services by making clients more aware of the options available to them but also enabling them to take greater responsibility for their own reproductive health as they make informed decisions about their lives (WHO, 2002). Health education and counselling of the

pregnant woman helps her to be well prepared for normal birth and possible complications and make informed decisions during pregnancy thereby reducing the risk of maternal morbidity and mortality.

These set standards guide the health care provider to provide quality ANC services thereby improving pregnancy outcomes (MOH, 2006). Measuring process of care can make a substantial contribution of quality of care because process measures are sensitive to deficiencies in acre and are indicators for action.

7.3 OUTCOMES

This component refers to the effects of care on the health status of the clients and the community following treatment (Maclaughlin & Kaluzny, 1999). The outcomes of care are monitored to detect treatment effectiveness on the client's condition. In maternal health care, outcome includes the direct impact of treatment on the current future health of a pregnant woman and her new born. The indirect impact is on satisfaction with the services offered and the health seeking behaviour of the pregnant woman (Maclaughlin & Kaluzny, 1999).

It is however much more difficult to gather specific outcome data on clients than it is to measure structure and process because there are other factors that determine outcome of care which include condition at time of treatment and client compliance. In FANC, positive outcomes are attributed to perceived helpfulness with FANC services which follows client's recommendation of the services to others. This study will not measure the outcomes of care because the elements to be measured require a long time to assess and there is limitation of time to conduct the study.

No clear ref. relationship between the conceptual framework and the write up - relate the framework to your study how did you apply the framework

8.0 METHODOLOGY

Research methods are the techniques researchers use to structure a study and gather and analyze information relevant to a research question to be used to develop evidence (Polit & Beck, 2006). This section aims at describing the research methodology on client's perception of the quality of focused antenatal care. The research design, sample selection and setting, instrument development, data collection, protections of research subjects, data management and analysis, duration of the study and budget for the research will be presented.

8.1 RESEARCH DESIGN

In Malawi, little is known about the clients' perception of quality of FANC they receive. For the purpose of this study, a descriptive research design of the quantitative paradigm will be used to explore client's perception of quality of FANC. Descriptive research helps to discover new meaning and describe what exists, determine the frequency with which something occurs, size, and measurable attributes of a phenomenon (Polit & Beck, 2006). This indicates that the data collected through descriptive quantitative study could be useful to justify and solve current problems associated with provision of quality antenatal care in Malawi.

8.2 SAMPLE SELECTION AND SETTING

The proposed study will be conducted at Lilongwe District Health Office, Bwaila antenatal clinic. Lilongwe district is the capital city of Malawi and is located in the central region of the country. The district covers an area of 35,592 square kilometres and has an estimated population of 669, 021 (NSO, 2008). Bwaila antenatal clinic is a referral centre which is essential to provide emergency obstetric care. Referral backup for pregnant women is crucial to primary health care in order to manage complications during pregnancy, delivery and post partum which can subsequently contribute to the reduction in maternal and neonatal deaths.

According to Lemeshow, Hosmer Klar & Lwanga (1990), a formula will be used to determine the sample size.

The formula: $n = \frac{Z^2 P(1-P)}{E^2}$

n= sample size, Z= confidence interval, P= estimated population and E= standard error

Total deliveries for 2008 for Bwaila = 12,096

Total antenatal attendance for 2008 for Bwaila = 27,307

$$\frac{12{,}096 \times 100}{27{,}307}$$

= 44% (mothers who attended ANC)

∴ 56% (mothers who didn't attend ANC)

$$n = (1.96)^2 \times (0.56) \div (0.05)^2$$

$$n = 0.9 \div (0.05)^2$$

$$n = 360$$

Sample size = 360 antenatal mothers.

The target population for this study include both primgravid and multigravid pregnant women receiving antenatal care on a second, third or fourth visit for the women to be sufficiently exposed to FANC. This would allow them to form their own opinion on the quality of care they received. Convenience or accidental sampling will be used where the most readily available subjects from Bwaila antenatal clinic will be used for the study (Polit & Hungler, 1989).

The heading should guide us on how the write up should be. You've started with saying the selection

8.3 RESEARCH INSTRUMENT

An observation checklist for FANC based on integrated performance standards for reproductive health in Malawi will be used by the researcher for collecting data pertaining to

What is your study population

quality of FANC (See Appendix A). The checklist covers dimensions of care of the pregnant woman done in the four targeted visits at the different ages of gestation. This includes physical plant and supplies, comprehensive history taking, observations and laboratory investigations, physical and obstetric examination, drugs and immunizations, management of obstetric complications and health education (RH Standards, MOH 2006). A structured questionnaire derived from the observation checklist will also be used to conduct an exit interview with the pregnant woman on the perceived quality of the FANC received according to the set guidelines (See Appendix B). This questionnaire has been translated into local language for easy understanding and communication with the respondents (See Appendix C).

8.4 PRETEST OF THE STUDY

According to Polit & Hungler (1989), a pre-test is the trial run of the interview schedule which reveals whether and how the instrument would work under administration of conditions with real subjects. Therefore pre-testing of the instruments will be done at Queen Elizabeth Central Hospital, Antenatal clinic. A sample of five antenatal clients on subsequent visit will be used to test the instrument in order to ensure its validity and reliability.

Validity refers to the degree to which an instrument measures the attribute it is designed to measure (Polit & Hungler, 1989). Basing on the results from the pilot study, changes will be made to the instrument before use for the study. Reliability of an instrument is the degree of consistency and accuracy with which it measures the attributes it is supposed to measure (Polit & Hungler, 1989). Interpretation of the data will be discussed with colleagues and the research supervisor. Thus the pre-test will help to ensure acceptability of the questions to the subjects, clarity and reliability of the questions, and to check if the questions are answering the set objectives and to determine the length of time that will be required to respond to the

questionnaires. The instruments will also be given to the research supervisor for comments, which will be used to refine the tool.

8.5 DATA COLLECTION

Data will be collected by using a structured questionnaire and a checklist for FANC based on performance standards for RH in Malawi. The questionnaire is divided into sections as follows; section one demographic data, section two, physical plant and supplies, section three client-provider relationship, section four perceived quality of ANC services and section five, data record from the antenatal card. The interviews will be conducted on one to one basis. The researcher tends to conduct the interviews herself. The interviews will be conducted on one to one basis. The researcher tends to conduct the interviews herself. The questions on the questionnaire will be in English (See Appendix B) and Chichewa (See Appendix C) and the interviews will be conducted in Chichewa for easy communication and understanding of the questions. The prospective subjects attending ANC will be approached and requested to participate in the study. Every mother who will meet the criteria for inclusion will be selected to participate. Detailed information about the study will be given to the subjects in common language before consent to participate (See Appendix D and E).

8.6 DATA MANAGEMENT AND ANALYSIS

All information will be collected using a questionnaire and a checklist which will have a client number. The questions will be checked for completeness and consistency of information at the end of each collection day and before storage. The data will be analysed by using descriptive statistics. Frequencies, means and percentages will be used to draw up conclusion of the study. Statistical package for social scientist (SPSS) will be used to analyze quantitative data on a computer. This will be done with the help of a statistician. Data will be

presented in different graphs and tables. Statistical tests will be applied to show relationship between variables.

8.7 PLAN FOR DISSEMINATION OF RESULTS

The researcher will disseminate findings through a written report and meetings. The report will be put in Kamuzu College of Nursing Libraries for staff and students to read. The involved subjects, DHO, DNO, Unit Matron and all academic staff members of KCN will be invited to meetings on research dissemination at the College in June 2010. A copy of the final report shall be submitted to Malawi College of Health Sciences Libraries.

8.8 PROTECTION OF HUMAN SUBJECTS/ ETHICAL CONSIDERATION

Ethics is defined as a theory or discipline dealing with principles of moral values and moral conduct (Lo-Biondo-Wood & Haber, 2006). Ethics relate to those conducting research who should be aware of their obligations and responsibilities, and the subjects who have basic human rights which need to be protected.

A Government clearance to conduct the study will be sought from the Ministry of Health and Population through the Research Officer, the Research and Publication Committee at college level as mandated by College of Medicine Research Committee. Permission to conduct the study will also be sought by writing a letter to the District Health Officer (DHO) of Lilongwe. A copy of the letter will be sent to the District Nursing Officer (DNO) and the unit matron (See Appendix F).

There are no known risks to the clients who will participate in the study. Several methods will be used to ensure protection of human subjects and include clear explanation of the

purpose of the study to the clients and asking them to sign a written consent form before participating in the study (See Appendix D). The researcher will also explain clearly to the research subjects that there are no direct benefits of the study, but it will be useful for future planning of FANC services. The subjects will be free to withdraw any time from taking part in the study if they so wish. Data collected will be treated with confidentiality and no names will be indicated on the questionnaire to maintain anonymity. The questionnaires will be kept in a locked drawer during the study to ensure privacy and they will also be destroyed soon after data analysis. The subjects will be assured of absolute confidentiality and respect because apart from being an ethical obligation, this shows the high integrity and dignity of the researcher as a basis of any professional research.

8.9 POSSIBLE CONSTRAINTS/ LIMITATIONS

The study will be conducted at one hospital because of financial constraint, hence the results may not be a true reflection of the whole Lilongwe district and may therefore not be generalized country wide. A small sample will be used due to limited funding and time for conducting the study.

9.0 TIME LINE 2009-2010

1. Proposal development	APRIL TO JUNE 2009
2. Submission of proposal for review	JULY to SEPT 2009
3. Pilot study	OCTOBER 2009
4. Data collection	NOV TO JAN 2010
5. Data analysis	FEB TO MARCH 2010
6. Compiling report and report writing	APRIL TO MAY 2010
7. Dissemination of findings	JUNE 2010

10.0 BUDGET

10.1 STATIONERY

ITEM	COST OF ITEM	TOTAL COST
5 Reams photocopying paper	Mk1,000 per rim	MK5, 000.00
2 Ruled paper	MK1,000 per rim	MK2, 000.00
10 Ball pens	MK50.00 each	MK 500.00
10 Pencils	MK20.00 each	MK 200.00
10 Eraser	MK50.00 each	MK 500.00
10 Pencil Sharpeners	MK50.00 each	MK 500.00
2 Typex	MK500 each	MK1, 000.00
20 Small envelops	MK15 each	Mk 300.00
10 Flat files	MK100.00 each	Mk1, 000.00
2 Lever arch files	Mk500.00 each	Mk1, 000.00
1 Stapler machine	Mk500.00 each	MK 500.00
1 Box staple wires	Mk300.00 each	MK 300.00
2 Flash stick	MK5,000.00 each	MK10, 000.00
	Sub Total	**MK22, 800.00**

10.2 PRINTING AND BINDING CHARGES

ITEM	COST OF ITEM	TOTAL COST
150 questionnaires	Mk50.00 each	MK7, 500.00
Printing 4 copies proposal	Mk500.00 each	MK2, 000.00
6 Permission letters	Mk10.000 each	MK 60.00
100 Consent forms	MK10.00 each	MK1, 000.00
Printing 4 copies dissertation	MK500.00 each	MK2, 000.00
Binding 4 proposals	MK200.00 each	MK 800.00
Binding 4 dissertations	MK500.00 each	Mk2, 000.00
	Sub Total	**Mk15, 360.00**

10.3 TRANSPORT CHARGES

Purpose of Trip	**Cost of Trip**	**Total Cost**
Transport of researcher to Lilongwe to personal advisor x 4 trips	Mk3, 100.00 x2x4 trips	MK31, 000.00
Transport of Researcher to and from study site x30 days	Mk500 per day	Mk15, 000.00
	Sub Total	**Mk46, 000.00**

10.4 TELEPHONE BILLS

		TOTAL COST
70 dollars of air time	MK140.00X70	MK9, 800.00
	Sub Total	**MK9, 800.00**
GRAND TOTAL		**MK93, 900.00**

10.5 ACCOMODATION AND MEALS (Self)

10.6 JUSTIFICATION FOR BUDGET

A lot of stationary is required for production and reproduction of the research proposal and dissertation. A lot of paper will be needed for printing checklists and questionnaires, proposal writing, pilot studying, data collection, data analysis, report writing, binding of proposal and dissertation. Ball pens, erasers, sharpeners, rulers and pencils will be used when drafting the proposal and dissertation. Flat files, lever arch files, will be used to store information. Envelopes will be used for sending permission letters and for dissemination of findings.

The researcher will also need transport money to travel to and from Blantyre and Lilongwe to meet the research supervisor but also to travel to the research site. Communication with the supervisor and significant others will be made through the phone and money is required to buy airtime. Money for secretarial services will be required throughout the study for printing the research proposal, questionnaires, permission letters and dissertation and binding proposal and dissertation. All this information will need to be stored safely in a flash disk.

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USE PEER REVIEWED HEALTH

APPENDIX A: INTEGRATED PERFORMANCE STANDARDS FOR REPRODUCTIVE HEALTH – MOH MALAWI

FOCUSED ANTENATAL CARE

PERFORMANCE STANDARDS	VERIFICATION CRITERIA	Y, N OR NA
PHYSICAL PLANT AND SUPPLIES		
1. The facility has a conducive waiting area/reception area	Observe if: • There is a waiting area for clients • There is good ventilation • The area has good illumination • The area is protected from sun and rain • There are sufficient places for sitting	
2. The facility has working toilets for clients and providers	Observe if the toilets have: • Doors that can be locked • Sinks with running water or bucket with tap • Toilet Tissue • Toilets with running water (flush or bucket) • Waste disposal bucket/container The toilets are available for: • Clients • Providers	
3. The facility has an adequate counseling area and an examination/procedure area for ANC services	Observe if: • The counseling area provides privacy for the client: – It has a door that can be closed or area is set up so that people outside cannot hear what is being said	

	• There is a desk • There are chairs for: – Client – Companion – Provider • The examination/procedure area provides privacy for the client: – Door that can be closed – Curtains or screens to prevent seeing the examination area from the door – Hand washing facilities inside or near And there is: • Chair for client and companion • Chair for provider • Table • Examination table • Light source • Container with 0.5% chlorine solution for decontamination • Container with leak proof plastic bag for contaminated waste • Good ventilation • Good Illumination	
4.The facility has equipment supplies and materials to provide ANC.services	Verify if the facility has the following equipment ready for use: • Gestational age calculator or calendar • Speculum • Sphygmomanometer • Albumin/Acetone deep sticks • Adult stethoscope • Fetal stethoscope • Thermometer • Weighing scale • Tape measure • Cotton /gauze swab • Examination gloves • Wooden spatula • Soap • Antiseptic	
5. The Antenatal clinic uses specific clinical records in conjunction with an appropriate HMIS.	Observe whether the following stationary is available: • Antenatal register • PMTCT register • Health passports	
FOCUSED ANTENATAL CARE		
6. Personnel conduct a **rapid initial evaluation** of the	Determine whether the provider asks the pregnant woman upon her arrival in the clinic whether she has or has had the following	

	pregnant woman at the first contact.	signs: ➢ Vaginal bleeding ➢ Respiratory difficulty ➢ Fever ➢ Severe headache/ blurred vision ➢ Severe abdominal pain ➢ Convulsions/loss of consciousness • Provide **immediate** attention in the event of any of the above signs		
Instructions for the assessor: Observe standards 7 to 15 in sequence with 2 pregnant women that come for ANC.				
7.	The provider receives and treats the pregnant woman cordially and respectfully.	Observe during care of two pregnant women whether the provider: • Greets the woman and her companion (if present) in a cordial manner • Speaks using easy-to-understand language for the client • Introduces him/herself • Calls her by her name • Encourages the woman to ask her companion to remain at her side, as appropriate • Does not allow individuals other than the necessary health care workers to go in or out during the provision of care without woman's permission • Explains to the woman and her companion what she/he is going to do and encourages her to ask questions • Responds to questions using easy-to-understand language for the client	1st	2nd
8.	The provider asks for personal and social information.	Observe during the care provided to two pregnant women (at least one of them must be her first visit), whether the provider: • Opens the health passport or reviews it for completeness • Asks the following information: – Name – Age – Address – Marital status – Religion – Education and occupation – Pregnancy was planned – Plans for transport (public, neighbor, etc) – Family sources of income/financial support		
9.	The provider obtains the obstetrical history.	Observe during the care provided to two pregnant women (at least one of them must be her first visit), whether the provider: Asks the following information: - Family history - Social history		

	- Past medical surgical history – Number of previous pregnancies, (mode and place of delivery) – Outcome of previous pregnancies – History (Hx) of abortions – Use of contraceptive – Date of last delivery – Past breast feeding history – Date of the first day of her last menstrual period and regularity of menses • Calculates gestational age • Calculates expected date of delivery (EDD)		
10. The provider takes the medical history.	Observe during the care provided to two pregnant women (at least one of them must be her first visit), whether the provider: Asks about danger signs: – Vaginal bleeding – Respiratory difficulty – Fever – severe headache – Severe abdominal pain – Convulsions/loss of consciousness – Blurred vision – Dizziness • Provides **immediate** attention in the event of any of the above danger signs • Asks if woman has any general health problems (i.e.: headache, joint pain, chronic diarrhea, weight loss, vaginal discharge, genital ulcers etc). Checks for: – Any hx of asthma, diabetes, tuberculosis, hypertension, epilepsy, cancer – Any hx of surgical interventions (specify) – Hx of blood transfusion – Hx of STIs – Any medications (specify) – Full or partial tetanus toxoid immunization – Use of ITN (Insecticides treated net) – Intermittent Presumptive Treatment: when and how many doses – Use of alcohol and/or tobacco – Knowledge of HIV status – Allergies		
11. The provider properly conducts a physical and obstetric examination	Observe during care of two pregnant women whether the provider: • Explains each stage of the examination to the woman using easy-to-understand language • Asks woman to empty her bladder		

	• Save urine and test for albumin/acetone • Helps the woman to climb up onto the examining table, and place a pillow under her head if available • Ensures that she remains covered during the examination **PHYSICAL EXAMINATION** • Washes hands with running water and soap for 10–15 seconds and dries with an individual clean towel, paper towel or allows hands to air-dry Observes the woman's • general appearance, • gait, • height, • weight Measures vital signs: • Pulse • Blood pressure • Temperature General examination: • Checks conjunctiva and palms for anemia • Examines the neck for enlarged thyroid glands and distended jugular veins • Examines the woman's breasts for inverted nipples, lumps and discharge **OBSTETRIC EXAMINATION** • Performs inspection of abdomen • Measures fundal height • Determines fetal lie and presentation, carrying out fundal, lateral and abdominal palpation • Listens to the fetal heart rate (beginning at 20 weeks) • Puts on examination gloves • Inspects the external genitalia for ulcers, sores and swelling • Inspect vaginal orifice for bleeding or abnormal discharge • Immense gloves in 0.5% chlorine • Removes and dispose of gloves • Helps her to get down from the examining table • Washes hands with running water and soap for 10–15 seconds and dries with an individual clean towel, paper towel or allows hands to air-dry • Records all relevant findings in the women's health passport • Informs woman on key findings		
12. The provider provides HIV Testing and Counseling (HTC) according to the protocol.	Observe whether the provider asks: • If she was never tested and if woman doesn't opt out, provides HTC:		

	– Assesses risk of the client – Explores options for reducing risk – Prepares client for HIV test (if she accepted to be tested) – Draws blood sample for HIV test – Tests Blood for HIV – Provides post test counseling • If the woman is HIV negative counsels her on preventive measures • If the woman is HIV positive: – Asks about HIV related symptoms (enlarged lymph nodes, oral ulcers or thrush) – Conducts clinical staging / refer to ART clinic – Assesses and manages (or) refers HIV related symptoms (including TB) – Asks about past or current treatment for HIV or HIV related symptoms – Asks if woman will disclose her HIV status and to whom – Asks what she is doing (or will do) to prevent transmission to others – Counsels client on safe sex practices – Counsels about ARV drugs for the women and her baby – Orients on infant feeding options, risks and benefits of mixed feeding – Helps her to choose appropriate feeding options – Explains optimal practice to the selected option (breastfeeding replacement feeding or expressed and heat treated milk) – Orients/refers to support groups – Reinforce the importance of disclosure to partner for testing – Orients on family planning • Provides take home Nevirapine tablet 200 mg and Nevirapine syrup for the Baby • Instructs how and when to take it including what do when vomiting occurs (Mpther: at the onset of labor, Baby: withing 72 hours of birth). Including what to do if vomiting occurs • Counsels on health facility delivery and to report as soon as labour starts		
13. The provider requests laboratory tests according to the national focused ANC package.	Observe during care of two pregnant women whether the provider requests or checks the following laboratory tests: • Hemoglobin • Blood grouping and Rh factor • syphilis test • Urine for protein • Urine for Glucose test • Urine for acetone test		

14. The provider properly conducts an individualized care based on findings and protocols.	Observe during care of two pregnant women whether the provider: • Explains findings from the clinical history, physical exam and the lab tests using easy-to-understand language • Provides routine medication: – Gives 3 tablets of SP under DOT[1] (Sulfadoxine/Pyrimethamine) according to the protocol (**If** woman is not allergic, has more than 16 weeks of gestation, **AND** at least 1 month apart from the previous doses) – Explains that in case she vomits within 30 minutes, the dose should be repeated – Provides FeFo once daily to last until next visit – Explains that she has to start taking FeFo after one week (after taking the SP) – Explains side effects of taking FeFo together with SP – Counsels about eating food rich in Vit C and avoid tea, coffee and colas when taking iron (caffeine affects absorption of iron) – Give Albendazole – Give Tetanus Vaccine (TTV) based on woman's need according to protocol • Develops a birth plan with the woman, including all preparations for normal birth and plan in case of emergency, including: – Skilled provider and place of birth – Signs and symptoms of labor and when she has to go to the hospital – Emergency transportation and funds – Items for clean and safe birth – Decision making person in case of complications occurring at home – Danger signs and symptoms • Provides specific advice and counseling as needed (i.e.: common discomforts, rest, safe sex, nutrition, hygiene, breastfeeding) • Provides advice on harmful habits such smoking, drug abuse and alcohol		
15. The provider evaluates the care and plans the returns visit with the pregnant woman.	Observes whether the provider: • Asks the woman to repeat the most important points of the counseling • Asks about, and responds to, any question that the woman asks • Sets a date for the next visit according to current protocol • Tells the woman that she must come anytime if she has danger signs and symptoms • Thanks the woman for coming • Records all information in the antenatal register and clients		

[1] Directly Observed Treatment

	health passport		
MANAGEMENT OF COMPLICATIONS			
Instructions for the assessor: Verify through direct Observation or guided interview the management of one client (standards 16-20). Use guided interview if there is no client.			
16. The provider manages Syphilis according to the national guidelines.	**DIRECT OBSERVATION:** If the woman is reactive to Determine Syphilis test, observe if the provider: • Gives single doses of Benzathine Penicillin 2.4 MU intramuscular (1.2 MU in each buttock) once a week for 3 weeks OR Erythromycin tablets 500 mg 6 hourly for 15 days if woman is allergic to Penicillin. • Explains to her that her partner(s) must receive the same treatment • If there are clinical reasons to suspect that woman has tertiary Syphilis gives a second and third dose of Benzathine Penicillin 2.4 MU stat, seven days apart OR Erythromycin tablets 500 mg 6 hourly for 30 days IF woman is allergic to Penicillin • Gives the woman a follow up schedule (two appointments seven days apart) • Encourages testing for HIV • Encourages the couple to abstain or use condoms **GUIDED INTERVIEW:** • Asks the provider how he /she manages a woman who is reactive to Syphilis test: – Gives single doses of Benzathine Penicillin 2.4 MU intramuscular (1.2 MU in each buttock) OR Erythromycin tablets 500 mg 6 hourly for 30 days If woman is allergic to Penicillin – Explains to her that her partner(s) must receive the same treatment • Asks the provider what to do if there are clinical reasons to suspect that woman has tertiary Syphilis: • Gives a second and third dose of Benzathine Penicillin 2.4 MU stat, seven days apart OR Erythromycin tablets 500 mg 6 hourly for 30 days IF woman is allergic to Penicillin • Asks provider about the follow-up schedule: – Gives the woman a follow up schedule in 7 days (if primary syphilis) and two appointments seven days apart if late syphilis) • Asks about other information/referral: – Encourages testing for HIV – Encourages the couple to abstain or use condoms	
17. The provider manages	**DIRECT OBSERVATION:**	

uncomplicated malaria according to the national guidelines.	If the woman has uncomplicated Malaria observe if the provider: • Gives 3 tablets of SP DOT[2] if she has not received a dose of SP in the last month • Provides analgesics (Paracetamol 500 mg or Aspirin 300 mg 2 tablets 8 hourly for 3 days) • Asks the woman to return to the clinic if there is no response after 3 days of SP treatment **GUIDED INTERVIEW:** Ask the provider how he (she) manages a woman who has uncomplicated Malaria: • Gives 3 tablets of SP DOT[3] if she has not received a dose of SP in the last month (first line of treatment) • Provides Analgesics (Paracetamol 500 mg or Aspirin 300 mg 2 tablets 8 hourly for 3 days) • Asks the woman to return to the clinic if there is no response after 3 days of SP treatment	
18. The provider manages severe malaria according to the national guidelines.	**DIRECT OBSERVATION IN THE ANTENATAL WARD:** If the woman has severe Malaria observe if the provider: • Clears and maintains the airway • Positions the woman in semi prone or on the side • Monitors vital signs • If convulsions occur gives diazepam 10 mg IV slowly over 2 minutes • Excludes other causes of convulsions (eclampsia, meningitis) • If hypoglycemia is suspected, gives 20mls of 50% Dextrose solution as bolus OR 50 ml sugar solution ORALLY (4-level tea spoons of sugar mixed with 200 ml of clean water) • Initiates treatment according to guidelines (Quinine) and refer to appropriate department **GUIDED INTERVIEW (Interview the clinician or the person who manages the situation)** • Asks provider how he/she manages a woman who has severe Malaria: – Clears and maintains the airway	

[2] Directly Observed Treatment
[3] Directly Observed Treatment

	– Positions the woman in semi prone or on the side – Monitors vital signs – If convulsions occur gives diazepam 10 mg IV slowly over 2 minutes – Excludes other causes of convulsions(eclampsia, meningitis) – If hypoglycemia is suspected, gives20mls of 50% dextrose solution as bolus OR 50 ml sugar solution ORALLY (4-level tea spoons of sugar mixed with 200 ml of clean water) – Initiates treatment according to guidelines (Quinine) and refer to appropriate department	
19. The provider manages moderate anemia according to the national guidelines.	**DIRECT OBSERVATION IN THE ANTENATAL WARD:** If the woman has moderate Anemia (Hb 7 to 11.5 g/dL) observe if the provider: • Identifies and treats cause(s) of anemia • Gives FeFo 200mg OD by mouth until delivery • Gives Anthelminthics (after the first trimester); Albendazole 400 mg or Mebendazole 500 mg stat orally • Advises about nutrition (green vegetables, animal proteins, legumes) • Reassess after two weeks and admit if indicated **GUIDED INTERVIEW:** Asks the provider how she/he manages a woman who has moderate Anemia (Hb 7 to 11.5 g/dL): • Identifies and treats cause(s) of anemia • Gives FeFo 200mg OD orally until delivery • Gives Anthelminthics (after the first trimester); Albendazole 400 mg or Mebendazole 500 mg stat orally • Advises about nutrition (green vegetables, animal proteins, legumes) • Reassess after two weeks and admit if indicated	
20. The provider manages severe anemia according to the national guidelines.	**DIRECT OBSERVATION IN THE ANTENATAL WARD:** If the woman has severe Anemia (Hb less than 7g/dL): • Admits her in the hospital • Identifies and treats cause of anemia • Gives FeFo 200mg OD orally until delivery • Counsels about the need to continue FEFO for three months after birth • Blood transfusion **GUIDED INTERVIEW:**	

	Asks provider how she/he manages a woman who has severe Anemia (Hb less than 7g/dL): • Admits her in the hospital • Identifies and treats cause of anemia • Gives FeFo 200mg OD orally until delivery • Counsels about the need to continue FEFO for three months after birth • Blood transfusion		
Pre-eclampsia. Instructions to the assessors: Review the two most recent cases of pre-eclampsia in the clinical recc months old). Review the clinical records using standards 21–23. The first column is for the first record, the second c			
21. The provider properly makes a diagnosis of pre-eclampsia.	Determine whether the following information is recorded: • There is a record on high blood pressure of 140/90 mm Hg or more starting from 20 weeks and proteinuria and/ rise in diastolic BP of 10-15mm Hg	1st	2n
22. The provider properly classifies pre-eclampsia according to protocol.	Determine whether the provider assesses and classifies pre-eclampsia: **Mild** • BP 130/90 mm Hgor a rise of 15-20 mm Hg of diastolic pressure or diastolic of equal to or more than 90 but less than 100 mm Hg • Proteinuria – trace or **Moderate** • BP 150/100 mm Hg but diastolic less than 110 mm Hg • Proteinuria + or **Severe** • BP diastolic more than or equal 110 mm Hg, a rise in diastolic of more than 20 mm Hg • Proteinuria 2+ or more	1st	2n
23. The provider properly manages pre-eclampsia according to classification.	Determine whether the following information is recorded: **Mild** • Decision on bed rest at home or admission in the hospital if home is too far way • Condition is monitored weekly	1st	2n

	• Orientation on worsening signs (severe headache, blurred vision) of the condition and should report if any be present • Orientation on diet: rich in protein, fibre, and vitamins but low in carbohydrate and salt or **Moderate** • Admit in antenatal ward • Full assessment conducted including BP and protein in urine • Bed rest • Provided a diet with high protein and vitamins but low in carbohydrate and salt • Monitored maternal and foetal wellbeing • Prescribed antihypertensives (aldomet 250-500mg tds PO) • Prescribed with diazepam, if BP doesn't change give Hydrazaline • Liver function tested, renal function tested, MPs • If less than 34 weeks gestation, gave corticosteroids, e.g. Dexamethason 6mg bd im for 2/7 **If severe, see management in labor and delivery.**		

APPENDIX B

FOCUSED ANTENATAL CARE CLIENT EXIT INTERVIEW AND RECORD REVIEW

Facility Name_____

Questionnaire number_____

Date of interview_____

Interviewer name_____

SECTION A: DEMOGRAPHIC DATA

A1. How old are you?

_____Years.

A2. What is your marital status?	**Tick**	**Code**
a. Married	[ ]	1
b. Single	[ ]	2
c. Widow	[ ]	3
d. Separated	[ ]	4
e. Divorced	[ ]	5

A3. How many children do you have?

_____.

A4. What is the highest level of education you have attained?

a. Std 1 – 4	[ ]	1
b. Std 5 – 8	[ ]	2
c. Form 1 – 2	[ ]	3
d. Form 3 – 4	[ ]	4
e. Other (specify)	[ ]	5
f. No education	[ ]	99

A5. What is your religion?

a. Roman Catholic	[ ]	1
b. Presbyterian	[ ]	2

c. Anglican [ ]……3

d. Islam [ ]……4

e. Other (specify) [ ]……5

A6. What is your occupation?

a. Teacher [ ]……1

b. Nurse [ ]……2

c. Accountant [ ]……3

d. Police [ ]……4

e. Business [ ]……5

f. Housewife [ ]……6

g. Domestic worker [ ]……7

h. Farmer [ ]……8

i. Other (specify) [ ]……9

A7. How long have you been pregnant? (In months)

_____Months

A8. How many times have you come for ANC for this pregnancy?

a. Once [ ]……1

b. Two times [ ]……2

c. Three times [ ]……3

d. Four times [ ]……4

A9. How many times do you think a woman needs to go for ANC at a health facility during pregnancy?

a. Once during pregnancy [ ].....1
b. 4 times [ ].....2
c. More than 4 times (specify [ ].....3
d. Do not know [ ].....99

SECTION B: HEALTH FACILITY CHARACTERISTICS

B1. How much time did you spend waiting to meet with the health provider today (in minutes)?

	Tick	Code
a. Minutes:_____		
b. Do not know	[ ]	99

B2. Not counting waiting time, how long (in minutes) was your consultation with the health provider today?

a. Minutes:_____
b. Do not know [ ].....99

B3. Did you think your consultation with the health provider was too short, too long, or the right length of time?

a. Too short [ ].....1

b. Too long [ ].....2

c. Right length of time [ ].....3

B4. Do you feel that the supplies in the antenatal clinic are adequate enough to enable you to receive quality care?

a. No not at all [ ].....1

b.No not really [ ].....2

c.Adequate [ ].....3

d.Don't know [ ].....99

B5. Is there a waiting area for you to sit while waiting for your consultation?

a. Yes [ ].....1

b. No [ ].....2

B6. Are there working toilets for clients at this facility?

a. Yes [ ].....1

b. No [ ].....2

SECTION C: CLIENT PROVIDER RELATIONSHIP

C1. How did the health provider ensure privacy during the ANC consultation

	Tick	**Code**
a. Use of antenatal care room during the consultation which was closed	[ ]	1
b. Use of drapes during examination	[ ]	2

c. Limiting number of people entering the room during the consultation [ ].....3

d. Drawing curtains in the room during the consultation [ ].....4

e. Other (specify) [ ].....5

C2. How did the health provider treat you with respect during the consultation?

a. Gave me a warm welcome [ ].....1

b. Spoke in a quite gentle tone of voice [ ].....2

c. Addressed me by my name [ ].....3

d. Obtained my permission before examination [ ].....4

C3. How did the provider care about your well being during the consultation

a. Listened actively to what I had to say [ ].....1

b. Asked if I had any questions or concerns [ ].....2

c. Spoke clearly in a language I could understand [ ].....3

d. Avoided distractions while providing ANC [ ].....4

C4. Did you ask the provider any questions during the ANC consultation

a. Did not have any questions [ ].....1

b. Did not feel comfortable to ask questions [ ].....2

c. Provider too busy/No time for questions [ ].....3

C5. Would you return to this facility for maternal health services?

a. Yes [ ].....1

b. No [ ].....2

C6. Did the provider ask you to come back for another visit?

a. Yes [ ].....1

b. No [ ].....2

C7. Did the provider tell you the expected due date?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

C8. Did the provider give you an update on how the baby is growing?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

SECTION D: PERCEIVED QUALITY OF SERVICES AVAILABLE AT THE ANTENATAL CARE CLINIC

D1. What type of information did the provider ask during your ANC consultation

	Tick	Code
a. past medical history	[ ]	1
b. Family history	[ ]	2
c. surgical history	[ ]	3
d. past and present obstetric history	[ ]	4

D2. What type of observations were carried out during your visit

a. Blood pressure	[ ]	1
b. Weight	[ ]	2
c. Height	[ ]	3

D3. What examination was done during your ANC visit

a. Head to toe	[ ]	1
b. Pallor	[ ]	2
c. Pedal oedema	[ ]	3
d. Breast examination	[ ]	4
e. Fundal height	[ ]	5

f. Featal heart rate [ ].....6

g. Vaginal examination [ ].....7

h. Pelvic assessment [ ].....8

D4. What blood tests were done during the ANC consultation

a. Heamoglobin [ ].....1

b. Grouping and X-match [ ].....2

c. HlV [ ].....3

d. Syphyllis test [ ].....4

D5. What urine tests were done during your ANC consultation

a. Protein [ ].....1

b. Sugar [ ].....2

D6. What drugs and immunization were given to you during your visit

a. Iron [ ].....1

b. SP [ ].....2

c. TTV [ ].....3

D7. What did you discuss on the importance of FANC? [ ].....1

a. Early detection and treatment of problems and complications [ ].....2

b. Prevention of complications and diseases [ ].....3

c. Birth preparedness and complication readiness [ ].....4

d. Health promotion [ ].....5

D8. What did you discuss about danger signs of the mother during pregnancy?

a. Vaginal bleeding [ ].....1

b. Severe headache [ ].....2

c. Convulsions [ ].....3

d. Labour pains before 37 weeks [ ].....4

e. Fever [ ].....5

f. Early rupture of membranes [ ].....6

D9. What did you learn about birth planning?

a. Making arrangements for delivery with the assistance of a skilled provider [ ].....1

b. Making arrangements for a place of delivery at a health facility [ ].....2

c. Preparation for transportation to the hospital for delivery and emergency care[ ].....3

d. Saving money to pay for hospital bills [ ].....4

e. A companion to stay with the woman during labour [ ].....5

D10. What did you discuss about items needed for a clean and safe birth

a. Perineal pads [ ].....1

b. Soap [ ].....2

c. Clean bed clothes [ ].....3

d. New unused razor blade [ ].....4

e. Water proof plastic cover [ ].....5

f. Cord ties [ ].....6

g. Warm clothes for the baby [ ].....7

D11. What did you learn about signs of labour which indicate need to contact the skilled provider

a. Regular progressive uterine contractions [ ].....1

b. Low back pain radiating from fundus [ ].....2

c. Show [ ].....3

d. Rupture of membranes or draining liquor [ ].....4

D12. Did the provider give you information or advice about diet and nutrition during pregnancy?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ]... 99

D13. Did the provider discuss with you the place of birth?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D14. Did the provider advise you to give birth in a health facility?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D15. Did the provider discuss with you the closest facility that provides delivery care during the day and night?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D16. Did you discuss with the provider about where to go for medical help if you have a problem during pregnancy or delivery, such as bleeding, swelling, convulsions or fits?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D17. Did you discus how you would get to the health facility if there was an emergency?

a. Yes [ ].....1

b. No [ ]..... 2

c. Do not know/remember [ ].....99

D18. Did you talk about the dangers of malaria during pregnancy?

a. Yes [ ].....1

b. No [ ]..... 2

c. Do not know/remember [ ].....99

D19. Did you talk about preventing and testing for HIV and AIDS?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D20. Did you talk about prevention of mother-to-child transmission of HIV?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

D21. Did you discuss about other sexually transmitted infections?

a. Yes [ ].....1

b. No [ ].....2

c. Do not know/remember [ ].....99

SECTION E: DATA RECORD FROM THE CARD WHICH WILL HELP TO EVALUATE THE QUALITY OF ANTENATAL CARE SERVICES

E1. Has the number of pregnancies including current pregnancy

been recorded on the card?

	Tick	Code
a. Yes	[ ]	1
b. No	[ ]	2

E2. For the current pregnancy, what is the gestational age in weeks at first ANC visit as recorded on the card?

----------Weeks

E3. How many times is weight recorded on the card?

Enter number of times weight was recorded. If not recorded, enter 0.

_____ Times

E4. How many times was blood pressure (BP) measured and recorded on the card?

Enter number of recordings. If not recorded, enter 0.

Recordings:_____

E5. How many times is fundal height recorded on the card?

Enter number of recordings. If not recorded, enter 0.

Recordings:_____

E6. How many times was the proteinuria measured and recorded on the card?

Enter the number of recordings. If not recorded, enter 0.

Recordings:_____

E7. Are the results of a haemoglobin (HB) test recorded on the card?

a. Yes [ ].....1

b. No [ ].....2

E8. Are the results of a pallor test recorded on the card?

a. Yes [ ].....1

b. No [ ].....2

E9. Was supplementation with iron/folic acid recorded on the card?

a. Yes [ ].....1

b. No [ ].....2

E10. How many tetanus toxoid immunizations were recorded on the card?

a. None [ ] 1

b One dose [ ].....2

c. Two doses [ ].....3

d. other (specify): [ ].....4

E11. Was the provision of malaria prophylaxis recorded on the card?

a. Yes [ ].....1

b. No [ ].....2

E12. How many doses of malaria prophylaxis are recorded on the card?

a. None [ ].....1

b. One [ ].....2

c. Two [ ] 3

E13. Do you have any suggestions for improving focused antenatal care services at this facility?

Thank you very much for your time

APPENDIX C: CHICHEWA QUESTIONAIRE

MAFUNSO A NDONDOMEKO YATSOPANO YA SIKELO YA PAKATI

Dzina la chipatala _____

Nambala _____

Tsiku _____

Wofunsa mafunso _____

GAWO A: ZA MBIRI YANU

A1. Muli ndi zaka zingati

_____

A2. Kodi ndinu **Chongani** **Code**

a. Okwatiwa [ ].....1

b. Mbeta [ ].....2

c. Mfedwa [ ].....3

d. Wopatukana pabanja [ ].....4

e. Wolekana pabanja [ ].....5

A3. Muli ndi ana angati?

_____

A4. Sukulu mudalekeza kalasi yanji

a. Standade 1-4 [ ].....1

b. Standade 5-8 [ ].....2

c. Folomu 1-2 [ ].....3

d. Folomu 3-4 [ ].....4

e. Zina (Tchulani) [ ].....5

f. Sindinaphunzileko [ ].....99

A5. Mumapemphera mpingo wanji?

a. Katolika [ ].....1

b. CCAP [ ].....2

c. Anglikani [ ].....3

d. Chisilamu [ ].....4

e. Zina (Tchulani) [ ].....5

A6. Mumagwira ntchito yanji

a. Yauphunzitsi [ ].....1

b. Yaunamwino [ ].....2

c. Yazachuma [ ].....3

d. Yapolisi [ ].....4

e. Yabizinesi [ ].....5

f. Mzimayi wapakhomo [ ].....6

g. Yothandiza ntchito zapakhomo [ ].....7

h. Yaulimi [ ].....8

A7. Mwakhala oyembekezela miyezi ingati?

_____

A8. Kodi mwabwela kangati ku sikelo ndi mimba imeneyi?

a. Kamodzi [ ]……1

b. Kawiri [ ]……2

c. Katatu [ ]……3

d. Kanayi [ ]……4

A9. Mukuganiza kuti mzimayi ayenela kubwela kangati ku sikelo ya pakati?

a. Kamodzi [ ]……1

b. Kanayi [ ]……2

c. Kopambana kanayi [ ]……3

d. Sindikudziwa [ ]……99

SECTION B: ZOKHUDZANA NDI CHIPATALA CHA SIKELO YAPAKATI

B1. Munadikila nthawi yaitali bwanji musanaonane ndi azachipatala okuthandizani?

a. Mphindi_____

b. Sindikudziwa [ ]……99

B2. Posawelengela nthawi imene munadikila musanaonane ndi azachipatala okuthandizani, munakhala nthawi yaitali bwanji mukuthandizidwa ndi azachipatala?

a. Mphindi_____

b. Sindikudziwa [ ]……99

B3. Mukuganiza kuti kuthandizidwa kwanu ndi azachipatala kunatenga nthawi yaitali bwanji?

a. Kunatenga kanthawi pang'ono [ ].....1

b. Kunatenga nthawi yambiri [ ].....2

c. Kunatenga nthawi yoyenela [ ].....3

B4. Mukuganiza kuti zipangizo zogwilitsila ntchito ku sikelo kuno ndizokwanila kuti inu mulandile chithandizo choyenela?

a. Ndizosakwanila konse [ ].....1

b. Ndizokwanila pang'ono [ ].....2

c. Eya ndizokwanila [ ].....3

d. Sindikudziwa [ ].....99

B5 Kodi malo odikilila ndiwokwanila kukhala musanaonane ndi okuthandizani?

a. Eya [ ].....1

b. Ayi [ ].....2

B6. Kodi zimbudzi za odwala ndizogwira ntchito pachiopatala pano?

a. Eya [ ].....1

b. Ayi [ ].....2

SECTION C: ZA UBALE PAKATI PA AZACHIPATALA NDI AZIMAYI APAKATI

C1.Kodi azachipatala anawonetsetsa bwanji kuti akuthandizani mwachinsinsi panokha

a. Chipinda chopangila sikelo chinali chotseka bwino [ ].....1

b. Amandifunditsa nthawi imene amandiyeza [ ].....2

c. Anachepetsa anthu olowa mchipinda chopangilamo sikelo [ ].....3

d. Makatani anali otseka bwino [ ].....4

e. Zina (Tchulani) [ ] 5

C2. Kodi azachipatala anakulemekezani bwanji pa zones zochitika ku sikelo

a. Anandilandila bwino [ ].....1

b. Amayankhula modekha [ ].....2

c. Amanditchula dzina langa [ ].....3

d. Anandipempha ngati ndingalole kuti andiyeze [ ].....4

C3. Kodi azachipatala anakusamalani bwanji pa zolinga zanu nthawi ya sikelo

a. Amamvetsela mwachidwi zimene ndimayankhula [ ].....1

b. Anandifunsa ngati ndinali ndi mafunso kapena zodandaula [ ].....2

c. Amayankhula chiyankhulo chomveka chomwe ine ndimamva [ ].....3

d. Panalibe zosokoneza nthawi imene amapeleka chithandizo cha sikelo [ ].....4

C4. Kodi munafunsa mafunso aliwonse lero kwa azachipatala nthawi ya sikelo?

a. Ndinalibe mafunso [ ].....1

b. Sindinali womasuka kufunsa mafunso [ ].....2

c. Azachipatala anatanganidwa kwambiri, panalibe nthawi yamafunso [ ].....3

C5. Kodi mungadzabwelenso kuchipatala kuno kudzalandila chithandizo cha uchembele?

a .Eya [ ].....1

b. Ayi [ ].....2

C6. Kodi azachipatala anakufunsani ndikukupatsani tsiku lina lodzabwela ku sikelo

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikukumbukila/sindikudziwa [ ].....99

C7. Kodi azaumoyo anakuuzani tsiku loyembekezela kubadwa mwana

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikukumbukila/sindikudziwa [ ].....99

C8. Kodi atakuyezani anakuwuzani mmene mwana akukulila

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikukumbukila/sindikudziwa [ ].....99

SECTION D: ZA MAGANIZO A AZIMAYI PA CHITHANDIZO CHOYENELA CHA SIKELO YAPAKATI

D1. Kodi azachipatala ankufunsani mafunso anji okhudzana ndi za mbiri yanu

a. Mbiri ya matenda anga [ ].....1

b. Mbiri ya matenda aku banja [ ].....2

c. Mbiri ya maopeleshoni [ ].....3

d. Mbiri ya uchembele [ ].....4

D2. Kodi azachipatala tsiku la sikelo

a. Anakuyezani kuthamanga kwa magazi [ ].....1

b. Anakukwezani sikelo kuti muyezedwe kulemela kwa thupi [ ].....2

c. Anakuyezani utali wa msinkhu [ ].....3

D3. Kodi nthawi ya sikeloyi azachipatala anakuyezaninso

a. Kuchokela kumutu kufika kumiyendo [ ].....1

b. Mmaso kuti awone kuchuluka kwa magazi [ ] 2

c. Kutupa kwa mapazi [ ].....3

d. Mabele [ ].....4

e. Kukula kwa mimba [ ].....5

f. Kugunda kwa mwana [ ].....6

g. Njira ya mwana [ ].....7

D4. Kodi anakutengani magazi tsiku la sikelo kuti akayeza

a. Kuchuluka kwa magazi [ ].....1

b. Gulu lanu la magazi [ ].....2

c. HIV [ ].....3

d. Chindoko [ ].....4

D5. Kodi anakutengani mikodzo kuti akayeze

a. Mapulotini [ ].....1

b. Sugar [ ]..... 2

D6. Kodi munapatsidwa mankwala anji ndi katemela tsiku la sikelo

a. Owonjezela magazi [ ].....1

b. Amalungo [ ].....2

c. Katemela wa kafumbata [ ].....3

D7. Munakambilana chani za kufunikila kwa ndondomeko myatsopano ya sikelo ya mimba

a. Kuthandiza kufufuza ndi kuchiza msanga zovuta zimene mzimayi angadwale chifukwa cha pakati [ ].....1

b. Kupewa matenda ndi zovuta za pakati [ ].....2

c. Kukonzekela bwino kubeleka ndi zovuta zimene zingabwele [ ].....3

d. Kulandila uphungu woyenela [ ].....4

D8. Munakambilana chani za zizindikilo zoopsya za mayi wapakati

a. Kutaya magazi [ ].....1

b. Mutu waching'alang'ala [ ].....2

c. Kukomoka [ ].....3

d. Kuyamba matenda masiku asanakwane [ ].....4

e. Kutentha thupi [ ].....5

f. Kusweka nsupa matenda asanayambe [ ].....6

D9. Munaphunzila chani za kukonzekela kubeleka kwabwino

a. Kukachilitsidwa ndi azachipatala amene anaphunzila bwino ntchito yobeleketsa [ ]....1

b.Kukachilila ku chipatala [ ].....2

c.Mayendedwe poipita kuchipatala kukachila ndinso zitachitika za dzidzidzi [ ].....3

d.Kusunga ndalama zolipilila kuchipatala [ ].....4

e.Kusankha munthu odzakhala naye mu chipinda chochilira kuchipatala matenda atayamba [ ].....5

D10. Munakambilana chani za zipangizo zofunika zoyenelela pobeleka

a. Nsalu zovala kumusi [ ].....1

b. Sopo osambila [ ].....2

c. Zofunda zoyela zoyala pabedi [ ].....3

d. Rezala latsopano [ ].....4

e. Chipepala cha plastiki choyela bwino [ ].....5

f. Dzingwe dzomangila mchombo wa mwana dzoyela bwino [ ].....6

g. Dzovala dzamwana dzotentha bwino ndinso zochapa [ ].....7

D11. Munaphunzira zotani pa zizindikilo zosonyeza kuti matenda ayamba kuti mupite kuchipatala

a. Kupweteka mimba pafupi pafupi [ ].....1

b. Kuwawa kwa nsana kuyambila kumimba [ ].....2

c. Kutuluka zonanda zosakaniza ndi magazi kumusi [ ].....3

d. Kusweka nsupa [ ]..... 4

D12. Kodi azaumoyo anakulangizani za zakudya zoyenelela nthawi imene muli ndi pakati?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D13. Kodi munakambilana kumene mungakachilile matenda atayamba

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D14. Anakulangizani kuti mukabelekele ku chipatala?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D15. Munakambilana za chipatala chapafupi chimene mungakabeleke nthawi ili yonse kaya masana kapena usiku?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D16. Anakulangizani kumene mungathe kupita mutakhala ndi vuto lililonse monga ngati kutaya magazi, kutupa kapena kukomoka?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D17 . Munakambilana mmene mungayendele kupita ku chipatala zitachitika zadzidzidzi?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D18. Munakambilana za kuopsya kwa malungo kwa mzimayi wa pakati?

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D19. Munakambilana za kupewa ndi kuyezetsa kachilombo ka HIV

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D20. Munakambilana za kapewedwe ka mayi kupatsila mwana kachilombo ka HIV ndi matenda a EDZI

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

D21. Munakambilana za matenda ena aliwonse opatsilana

a. Eya [ ].....1

b. Ayi [ ].....2

c. Sindikudziwa/ Ndaiwala [ ].....99

SECTION E: ZOLEMBEDWA PA KHADI YA SIKELO ZA CHITHANDIZO CHIMENE CHALANDILIDWA

E1. Kodi pa khadi palambedwa nambala ya mimba zimene mayiyu anatengapo kale kuphatikizapo yatsopanoyi?

a. Eya [ ].....1

b. Ayi [ ].....2

E2. Kodi mimba yatsopanoyi inali miyezi ingati (kuwelengetsa masabata) pamene mayiyu amayamba sikelo?

sabata_____

E3. Kodi kulemela kwa sikelo kwalembedwa kangati pa khadiyi?

_____

E4. Kodi kuthamanga kwa magazi kwalembedwa kangati pa khadi

_____

E5. Kodi kukula kwa mimba kwalembedwa kangati pa khadi

_____

E6. Kodi kuyeza mikodzo ya protini kwalembedwa kangati pa khadi

_____

E7. Zotsatila za kuyeza kuchuluka kwa magazi zalembedwa?

a. Eya [ ].....1

b. Ayi [ ].....2

E8. Zotsatila zoyeza mmaso kuchuluka kwa magazi zalembedwa?

a. Eya [ ].....1

b. Ayi [ ].....2

E9. Kodi zalembedwa pa khadi kuti mayi analandila mankwala owonjezela magazi?

a. Eya [ ].....1

b. Ayi [ ].....2

E10. Katemela wa kafumbata walembedwa kangati pa khadi?

a. Sanalembedwe [ ].....1

b. kamodzi [ ].....2

c. Kawiri [ ].....3

d. Zina [ ].....4

E11. Kodi pa khadi palembedwa kuti mayi analandila mankwala oteteza ku malungo?

a. Eya [ ].....1

b. Ayi [ ].....2

E12. Mankwala a malungo alembedwa kuti analandila kangati?

a. Sanalandile [ ].....1

b. Kamodzi [ ].....2

c. Kawiri [ ].....3

E13. Muli ndi maganizo aliwonse othandiza kukonza chithandizo cha uchembele pa chipatala pano?

_____

_____

Zikomo kwambiri chifukwa cha nthawi yanu.

APPENDIX D: ENGLISH CONSENT FORM

Dear Participant,

I am a second year student at Kamuzu College of Nursing pursuing a Master of Science Degree in Midwifery. I would like to request for your consent to participate in a research study. This is for my dissertation in partial fulfilment of the Master of Science Degree in Midwifery.

The purpose of this study is to assess Quality of Focused Antenatal Care. In participating in this study, you will be interviewed using a questionnaire. There are no known risks associated with this study and there is no payment attached to your participation. You are free to withdraw your consent and stop participating at any time and this will not influence the health care given to you. You are also free not to answer some questions. Your name will not be put on the questionnaire; instead, numbers will be used to ensure anonymity and confidentiality. The responses will be kept in a locked drawer and destroyed after the study.

I would appreciate your responses to the questions. If you have any questions concerning the study, you can call Dr Malata on phone number 01 752 622 or 0888546883.

Statement of Participation

I, the undersigned have read and understood the above information. I have been given a chance to ask questions and to withdraw my consent at any time. I fully understand that my participation is purely voluntary.

I fully wish to participate in this study.

Date: Signature:

Date: Signature of researcher

APPENDIX E: CHICHEWA CONSENT FORM

KALATA YOVOMELEZA KUCHITA NAWO KAFUKUFUKU

Dzina langa ndine mayi Florence Lungu. Ndine wophunzira pa sukulu ya unamwino ndi uzamba ya Kamuzu College of Nursing. Ndikufuna kupempha chilolezo chanu kuti mutenge mbali mu kafukufuku amene ndikupanga ngati mbali ya maphunziro anga.

Cholinga cha kafukufukuyu ndi kufuna kumva maganizo anu m;mene mukuwonera chithandizo chimene mukulandila cha ndondomeko yatsopano ya sikelo yapakati.

Mukavomeleza kutenga mbali, ndidzakufunsani mafunso okhudzana ndi maganizo anu pa chithandizo ndanenachi ndipo mayankho ake ndidzachonga papepala lofunsila mafunso pomwepa. Palibe zovuta zilizonse zodziwika zimene mungakumane nazo potenga mbali mu kafukufukuyu komanso dziwani kuti palibe malipilo aliwonse mukavomela kuyankha mafunsowa.

Kutenga mbali kapena kusatenga mbali ndi ganizo loti mupanga mwa ufulu wanu ndipo muli omasuka kusinntha maganizo kusiya nthawi iliyonse kutenga mbali mu kafukufukuyu. Izi sizikhudzana mu njira ina iliyonse ndi chithandizo chomwe mukuyenela kulandila pamalo ano.

Dzina lanu sililembedwa pa pepala loyankha mafunso ndipo zimene muyankhe zidzakhala za chinsinsi. Ndithokoza kwambiri kuyankha kwanu kwa mafunso. Ngati muli ndi mafunso imbani kwa Dr Malata pa nambala izi 01 752 622 kapena 0888546883.

CHIVOMELEZO

Ndawerenga/ndawuzidwa zomwe zalembedwa pamwambapa ndipo ndazimvetsa kotero ndavomeleza kutenga mbali mosakakamizidwa.

Wotenga mbali Tsiku_____

Signature

Chala ngati simulemba _____

Ndawafotokozela mayiwa za kafukufukuyu ndipo avomela kutengapo mbali

Wofunsa mafunso Tsiku_____

Signature

APPENDIX F: PERMISSION LETTERS

University of Malawi

Kamuzu College of Nursing

Blantyre Campus

Box 415

Blantyre.

13th September, 2009.

The Chairman

Research and Publication Committee

University of Malawi

Kamuzu College of Nursing

P/Bag 1

Lilongwe.

Dear Sir/Madam,

REQUEST FOR APPROVAL TO CONDUCT A RESEARCH PROJECT

I am a second year Master of Science Degree in Midwifery student at the above mentioned college. In partial fulfilment of the Masters Degree, I am expected to carry out a research project. My research topic is "Quality of Focused Antenatal Care" at Bwaila Antenatal Clinic in Lilongwe district.

The purpose of writing you is to request for approval to conduct the study. Enclosed is my research proposal.

Looking forward to your favourable consideration.

Yours Faithfully,

Mrs Florence Lungu

University of Malawi

Kamuzu College of Nursing

Blantyre Campus

Box 415

Blantyre.

13th September, 2009.

Ministry of Health and population

P. O box 30377

Lilongwe.

Through: The Research Supervisor

Dr A. Malata

Kamuzu College of Nursing

Private Bag 1

Lilongwe.

Attention: Research Officer

Dear Sir/Madam,

REQUEST FOR NATIONAL APPROVAL TO CONDUCT A RESEARCH PROJECT

I am a second year Master of Science Degree in Midwifery student at the above mentioned college. In partial fulfilment of the Masters Degree, I am expected to carry out a research project. My research topic is "Quality of Focused Antenatal Care" at Bwaila Antenatal Clinic in Lilongwe district.

The purpose of writing you is to request for national approval to conduct the study in Lilongwe district. Enclosed is my research proposal.

Looking forward to your favourable consideration.

Yours Faithfully,

Mrs Florence Lungu.

Kamuzu College of Nursing

Blantyre Campus

Box 415

Blantyre.

13th September, 2009.

The District Health Officer

Lilongwe District Health Office

Lilongwe.

Through: The Research Supervisor

Dr A. Malata

Kamuzu College of Nursing

Private Bag 1

Lilongwe.

Dear Sir/Madam

APPLICATION FOR PERMISSION TO USE BWAILA HOSPITAL ANTENATAL CLINIC AS A RESEARCH SITE

I am a second year Master of Science Degree in Midwifery student at the above mentioned college. In partial fulfilment of the Masters Degree, I am expected to carry out a research project. My research topic is "Quality of Focused Antenatal Care" at Bwaila Antenatal Clinic in Lilongwe district.

The purpose of writing you is to request for permission to use your hospital as a research site for data collection. The study will involve exit interviews with antenatal mothers in Antenatal Clinic. A checklist will also be used to collect data. Enclosed is my research proposal. There are no known risks involved in the study.

Looking forward to your favourable consideration.

Yours Faithfully,

Mrs Florence Lungu

Kamuzu College of Nursing

Blantyre Campus

Box 415

Blantyre.

13th September, 2009.

The Hospital Director

Queen Elizabeth Central Hospital

Box 95

Blantyre.

Through: The Research Supervisor

Dr A. Malata

Kamuzu College of Nursing

Private Bag 1

Lilongwe.

Dear Sir/Madam

APPLICATION FOR PERMISSION TO CONDUCT A PILOT STUDY AT QECH ANTENATAL CLINIC

I am a second year Master of Science Degree in Midwifery student at the above mentioned college. In partial fulfilment of the Masters Degree, I am expected to carry out a research project. My research topic is "Quality of Focused Antenatal Care" at Bwaila Antenatal Clinic in Lilongwe district.

The purpose of writing you is to request for permission to use your hospital to conduct a pilot study at Queen Elizabeth Central Hospital. The study will involve exit interviews with five antenatal mothers in Antenatal Clinic. A checklist will also be used to collect data. This will help me to test my instruments. There are no known risks involved in the study.

Looking forward to your favourable consideration.

Yours Faithfully,

Mrs Florence Lungu

CC: The Chief Nursing Officer

The Unit Matron

Head of Department (OBG)