



UNIVERSITY OF MALAWI

KAMUZU COLLEGE OF NURSING

A RESEARCH PROPOSAL ON

UNDERSTANDING CAUSES OF HIGH PREVALENCE OF PUEPERAL SEPSIS

AT KOCHHE HEALTH CENTRE, MANGOCHI

SUBMITTED TO

**FACULTY OF NURSING IN PARTIAL FULFILMENT FOR THE AWARD OF
BACHELOR OF SCIENCE IN NURSING**

PRESENTED BY

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SUPERVISED BY

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DATE

SEPTEMBER, 2013

DECLARATION

I, Lusekero Mboma, hereby declare that this proposal is my own work and that, to the best of my knowledge has never been presented for the award of any other degree or diploma of the University or any other institution of higher learning, except where due acknowledgement has been made.

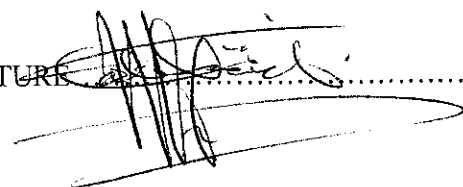
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DATE 12/09/2013



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DATE 13/09/2013

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DEFINITION OF TERMS

Parametritis is an inflammation of the parametrium (connective tissue adjacent to the uterus).

Peritonitis is an inflammation of the peritoneum, the thin tissue that lines the inner wall of the abdomen and covers most of the abdominal organs

Septicaemia also known as blood poisoning, is a potentially life threatening condition caused by a rapid increase of bacteria in the blood stream.

Eclampsia is an acute and life-threatening complication of pregnancy, characterized by the appearance of tonic-clonic seizures, usually in a patient who has developed pre-eclampsia.

Primigravida is a medical term used to refer to a woman who is pregnant for the first time.

SUMMARY

Puerperal sepsis is one of the major causes of maternal death that accounts for 15 per cent of all maternal deaths in developing countries. This has prompted the researcher to explore causes of high prevalence of puerperal sepsis at Koche Health Centre in Mangochi District which reported high prevalence of the condition. The objectives of the study are; to assess knowledge of puerperal sepsis amongst women in the postpartum period; to assess the environment in which delivery is taking place; to identify any problems faced during ante, intra and post partum; and to assess cultural practices towards pregnant and post natal women. This will be a descriptive qualitative study that will utilise an in-depth interview guide to collect data. A sample of 10 mothers that have ever suffered from puerperal sepsis will be selected using purposive sampling method. All ethical considerations will be taken care of by the researcher. Data shall be analysed using content analysis. The results of the study will be disseminated to the faculty of Nursing at Kamuzu College of Nursing because the study is in partial fulfillment of the degree in nursing which the researcher is undergoing. They will also be disseminated to the Mangochi District Health Officer and Koche Health Centre so that the communities around can benefit from the study hence reduce maternal morbidity and mortality.

CHAPTER 1: INTRODUCTION

Puerperal sepsis is any bacterial infection of the genital tract which occurs after the birth of a baby. It is usually more than 24 hours after delivery before the symptoms and signs appear (“WHO | Managing puerperal sepsis,” n.d.). The uterine infection may start before the onset of labour i.e. in cases of pre-labour rupture of the membranes, during labour, or in the early postnatal period before healing of lacerations in the genital tract and the placental site have taken place. Following delivery, puerperal sepsis may be localized in the perineum, vagina, cervix or uterus. Infection of the uterus can spread rapidly if due to virulent organisms, or if the mother’s resistance is impaired. It can extend beyond the uterus to involve the fallopian tubes and ovaries, to the pelvic cellular tissue causing **parametritis**, to the pelvic peritoneum causing **peritonitis**, and into the blood stream causing **septicaemia**.

Sepsis is an important public health problem contributing to maternal morbidity and mortality. Puerperal sepsis can be rapidly fatal thus why the researcher took time to think about this condition and the damage it has caused in Malawi so as to find means of reducing maternal morbidity and mortality through puerperal sepsis.

1.1 BACKGROUND

Puerperal sepsis is one of the major causes of maternal death and accounts for 15 per cent of all maternal deaths in developing countries. If it does not cause death, puerperal sepsis can cause long-term health problems such as chronic pelvic inflammatory disease (PID) and infertility.

The global magnitude of the problem is limited hence the need for a systematic review summarizing the true extent of puerperal sepsis (Chisembele, 2004). So this means that if the prevalence of puerperal sepsis is not known it becomes very difficult to determine the extent of

the problem hence the researcher's idea to explore causes of high prevalence of this condition at Koche Health Centre in Mangochi District which will help reduce maternal morbidity and mortality. Maternal sepsis is an infrequent, but important complication of pregnancy, childbirth and puerperium, resulting in significant maternal morbidity and mortality worldwide. Improved outcome is possible through improved service provision (van Dillen, Zwart, Schutte, & van Roosmalen, 2010).

The current estimate of maternal mortality for 2010 is 460 maternal deaths per 100,000 live births (Bowie & Geubbels, n.d.). The study done by Ali (2009), in three countries (United Kingdom, India and Malawi) shows among other things that the maternal mortality is mainly caused by direct causes both in Malawi and India and in the United Kingdom the maternal mortality is mainly from indirect causes.

The three most important causes of death in the global studies are sepsis, complications of abortion and obstructed labour, which sometimes results in ruptured uterus. According to recent analysis of trends of the Millennium Development Goal (MDG) health targets for the Health Sector Strategic Plan shows a reduction in Maternal Mortality Ratio since 2000, but less than needed to meet the MDG target. The maternal mortality rate decreased from 984 per 100,000 live births in 2004 to 675 per 100,000 in 2010, with a projected rate of 435 in 2015 against a MDG target of 155. The 2010 Maternal Mortality Ratio estimate used by the United Nation for Malawi is 460 (290-710) per 100,000 live births and a lifetime risk of maternal death of 1:36 (Bowie & Geubbels, n.d.) However, this is in contrast with prevalence of puerperal sepsis which is going up at Koche Health Centre in Mangochi, yet it is one amongst the major causes of maternal mortality in Malawi. Reports from Mangochi show that in 2011, July to December there were 25 cases of puerperal sepsis, in 2012, January to June 37 cases and in 2012, July to December 42 cases. This shows that the cases are just going up at this health facility which is different from other health facilities, for example Monkey bay which had 1 case in 2011 July to

December, 1 case in 2012 January to June and 4 cases in 2012 July to December. One of the skills specific to preventing and managing puerperal sepsis includes identification of risk factors hence the researcher's interest in exploring the factors present at Koche Health Centre which may contribute to high prevalence of puerperal sepsis with the aim of reducing maternal morbidity and mortality.

1.2 PROBLEM STATEMENT

There are a lot of interventions that have been employed to reduce maternal deaths in Malawi due to several causes including puerperal sepsis. It has been discovered that prevalence of puerperal sepsis has gone up as of recent at Koche Health Centre in Mangochi District. Records as already stated in the background have shown that Koche is reporting more cases of puerperal sepsis compared to other fellow health centres around the district which are almost of the same catchment population.

1.3 SIGNIFICANCE OF THE STUDY

This study will help Koche Health Centre to improve the care rendered to patients as well as the community at large in preventing puerperal sepsis. This involves care rendered during pre, intra and post partum period. The study will also help Malawi in general to improve its care rendered which will contribute to reduction of maternal deaths through puerperal sepsis.

1.4 OBJECTIVES OF THE STUDY

1.4.1 BROAD OBJECTIVE

- To explore causes of high prevalence of puerperal sepsis at Koche health centre in Mangochi.

1.4.2 SPECIFIC OBJECTIVES

- To assess knowledge of puerperal sepsis amongst women in the postpartum period
- To assess the environment in which delivery is taking place
- To identify any problems faced during ante, intra and post partum
- To assess cultural practices towards pregnant and post natal women

CHAPTER 2: LITERATURE REVIEW

2.1 KNOWLEDGE OF PUERPERAL SEPSIS AMONGST WOMEN IN THE POSTPARTUM PERIOD

Maternal and child health are high priorities for international development. Through a Review of published work, it shows substantial gaps in current knowledge on incidence (cases per live births), aetiology, and risk factors for both maternal and early onset neonatal bacterial sepsis in sub-Saharan Africa. Although existing published data suggest that sepsis causes about 10% of all maternal deaths and 26% of neonatal deaths, these are likely to be considerable underestimates because of methodological limitations (Seale, Mwaniki, Newton, & Berkley, 2009).

A study was conducted on pregnant women with the aim to explore knowledge of obstetric complications among primigravida by Kumbani & McInerney. Forty-five primigravida women from the urban setting were interviewed. The result shows that the majority of the participants 53 percent did not know any problem that could occur during and after the birth of the baby

where Health Care Workers are found to act in accordance with the outlined hand washing protocols, they rarely spend more than 15 seconds doing so. This leads to spreading infection from one mother with puerperal sepsis to the other. Similarly, Hussein, Mavalankar, Sharma, & D'Ambruoso (2011) in their review suggested a global, targeted initiative that could raise awareness of the need for improved infection control measures during childbirth.

In developing countries, many women still deliver at home, making prevention of infection at home and in the community important, especially if family members and traditional birth attendants are unaware of the need for infection prevention. The provision of delivery care by health professionals and in health facilities is expected, and indeed, likely to decrease infection rates because of use of clean practices, sterile gloves and instruments.

2.3 PROBLEMS FACED DURING ANTE, INTRA AND POST PARTUM

The predisposing factors or conditions leading to the development of sepsis are quite varied and include: home birth in unhygienic conditions, low socioeconomic status, poor nutrition, primiparity, anaemia, prolonged rupture of membranes, prolonged labour, multiple vaginal examinations in labour (more than 5), caesarean section, and obstetrical maneuvers. During the last few years, a growing body of evidence suggests that the single most important risk factor for postpartum infection is caesarean section. Considering the increasing trend of rates of caesarean section all over the world, it is likely that puerperal infection incidence will see a similar trend in future years. The rising incidence of nosocomial infections and of antibiotic resistance may also contribute to this. Caesarean section is perhaps the greatest risk factor for postpartum endometritis, with a 20- to 30-fold relative risk compared with a vaginal delivery. A Cochrane systematic review conducted by Smaill and Hofmeyer identified 66 randomized controlled trials comparing antibiotic prophylaxis or no treatment for both elective and non-elective caesarean sections. They found an average rate of endometritis in the control groups in those women undergoing

elective caesarean section of 9.2% (0%–24%), and for the women undergoing non-elective caesarean sections, the average incidence of endometritis in the control groups was 28.6% (3%–61%). The use of antibiotic prophylaxis reduced by two-thirds to three-quarters the incidence of endometritis. It is reported that without the use of prophylactic antibiotics, 2%–8% of patients may develop pelvic infection after normal vaginal delivery and 18%–25% after operative delivery.

This paper reports a facility based study in north-central Nigeria to determine the magnitude, trends, causes and characteristics of maternal deaths before and after the launch of the Safe Motherhood Initiative in Nigeria, with a view to suggesting strategic interventions to reduce these deaths. There were 38,768 deliveries and 267 maternal deaths during the period under review, giving a Maternal Mortality Ratio (MMR) of 740/100,000 total deliveries. The major direct causes of deaths were found to be haemorrhage (34.6%), sepsis (28.3%), eclampsia (23.6%) and unsafe abortion (9.6%). (Ujah et al., 2005).

The study done by Dawson & Robson (2012), reflects on the care given to a woman re-admitted to hospital during the postnatal period with puerperal sepsis. It was discovered that the condition has recently re-emerged as a major cause of maternal deaths. They recommended that midwives must be vigilant in order to reduce the risks posed by puerperal sepsis and also that there should be potential avenues of research which must be explored to offer women the best evidence-based care. The recent development of national guidelines is necessary to inform practice.

According to The World Health Organization, as many as 5.2 million new cases of maternal sepsis are thought to occur annually and an estimated 62,000 maternal deaths will result from the condition (Polinder, Haagsma, Stein, & Havelaar, 2012). In a similar way, audit report done by Pattinson, Say, Makin, & Bastos (2005) on maternal deaths says that puerperal sepsis was found

to be one of the causes of maternal deaths, it was therefore recommended that research must concentrate on determining factors before, during and after delivery that contribute to prevalence of complications leading to maternal deaths in which puerperal sepsis is one of them. In addition to this, Maharaj (2007) in his study says that this condition can be preventable. He further discovered that most postpartum infections take place after hospital discharge, which is usually 24 hours after delivery. In the absence of postnatal follow-up, as is the case in many developing countries, many cases of puerperal infections can go undiagnosed and unreported hence complicating.

Despite several interventions employed towards preventing puerperal sepsis, there is still no big change in its prevalence. In view of this Kehoe, Neilson, & Norman (2010) did a study to find out why. In their study, they highlighted the three major problems which are: lack of accurate data on which to base care, the need to improve the understanding of organisation and behavioural change, and poor visibility of the burden of puerperal sepsis which means that there is no vision of how severe this condition can be despite several prevalent studies done.

Hussein et al. (2011) reviews health system infection control measures pertinent to labour and delivery units in developing country health facilities. They found that organisational improvements, training, surveillance and continuous quality improvement initiatives, used alone or in combination have been shown to decrease infection rates in some clinical settings. There is limited evidence available though on effective infection control measures during labour and delivery and from low resource settings. They therefore recommended a health systems approach which is necessary to reduce maternal morbidity and mortality.

CHAPTER 3 CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

This study will use Betty Neuman's System model (Figure 1). Betty Neuman believes that each client system is unique with a composite of factors and characteristics within a given range of responses contained within a basic structure. Many known, unknown and universal stressors exist though each differs in its potential for disturbing a client's usual stability level. Man is a composite of the interrelationship of the five variables which are: **Physiological** referring to bodily structure and function; **Psychological** referring to mental processes, functioning and emotions; **Sociocultural** referring to relationships; and social/cultural functions and activities; **Spiritual** referring to the influence of spiritual beliefs; and then finally **Developmental** which refers to life's developmental processes (Students, 2008). These variables are present at all times.

The outer ring (Figure 1) is a broken circle, indicating an open system that exchanges energy with the environment. This outer ring is called the **flexible line of defence** which protects the system in a dynamic way, thus, expanding when more protection is provided and contracting when less protection is available. Once an individual is exposed to stress, the flexible line of defence will be alarmed to protect the **normal line of defence** to keep the system from the stressor reactions. However if this individual is continuously exposed to stress and if the flexible line of defence is no more able to cope up with the stressors, the normal line of defence will be altered. If this happens, there will be a threat to the wall that protects the basic structure of the individual and therefore causing instability of the system and illness occurs.

CULTURE, ENVIRONMENT, KNOWLEDGE AND
EVENTS DURING LABOUR AND DELIVERY

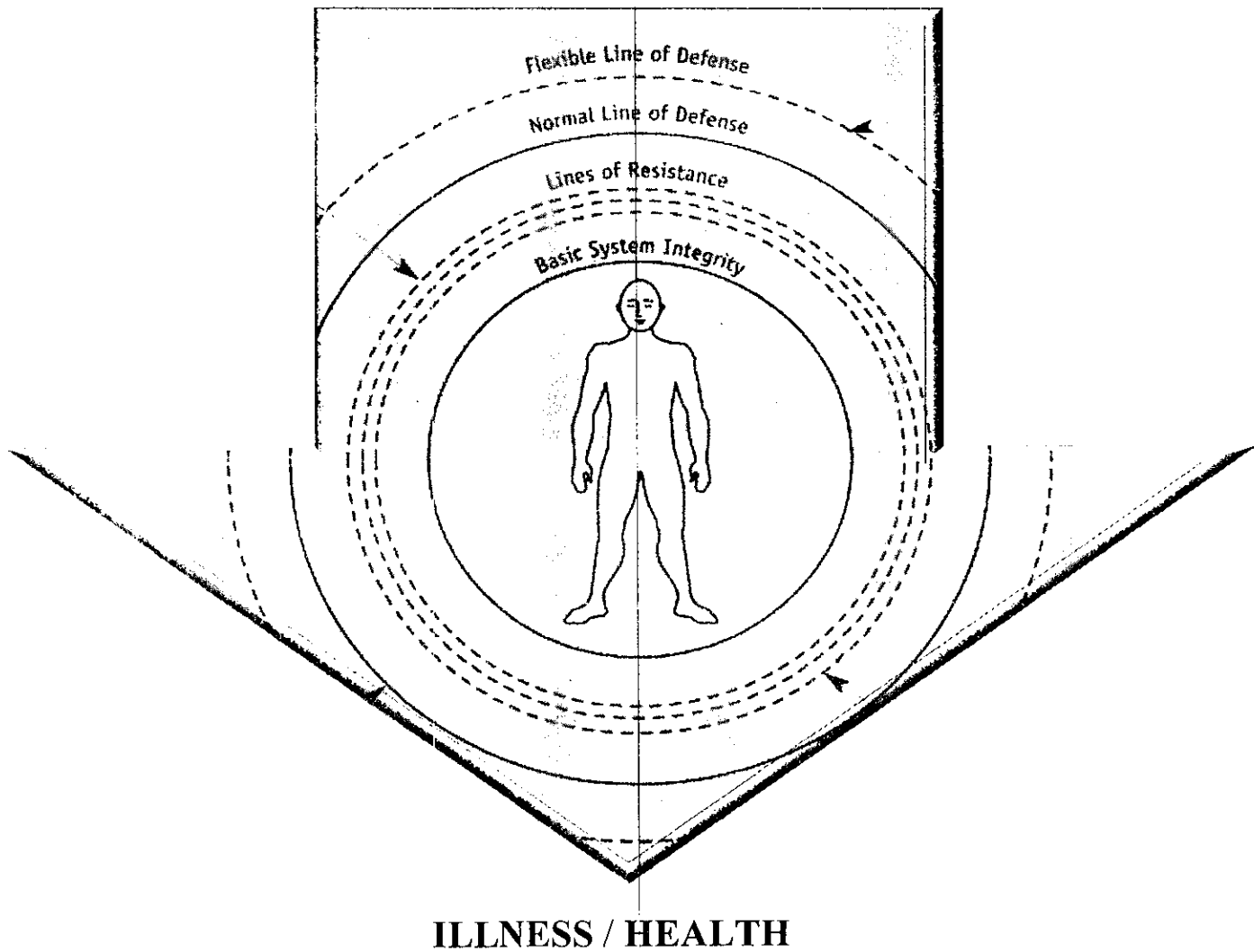


FIGURE 1: BETTY NEUMAN SYSTEM'S MODEL

Adapted from: (George, 2010).

3.3 APPLICATION OF THE MODEL

Betty Neumann's system model (Figure 1) provides a comprehensive, flexible, holistic and system based perspective for nursing. It focuses attention on the response of the client system to actual or potential environmental stressors. Stressors in this case refer to knowledge, environment, cultural practices and events experienced during labour and delivery. These stressors have the potential to disturb the lines of defense hence causing puerperal sepsis. However, they have the potential to strengthen these lines of defense if handled the other way round.

Knowledge focuses on the literacy level of the woman which contributes to prevalence of puerperal sepsis. For example, when the woman is illiterate, it will be difficult for such a woman to grasp the concept during health education. Therefore instead of the woman to do what she was told, she does the opposite way because she did not get the concept hence increase puerperal sepsis prevalence (Figure 1).

Environment has something to do with a set up in which delivery is taking place. Most of the times if it is home delivery, the environment is not that clean compared to hospital delivery. However, there can be unclean environment right inside the hospital especially when the delivery packs are not sterile and if there is no hand washing before examining a patient. These can predispose a woman to puerperal sepsis hence increasing its prevalence (Figure 1).

Cultural practices can also contribute to invasion of the line of defense leading to infection in the way that, for example, postnatal women are given some traditional herbs to insert in the vagina so that the vaginal wall can return to its normal state fast. These can be a source of infection in

the genital tract leading to puerperal sepsis. This will therefore cause increase in prevalence of puerperal sepsis (Figure 1).

Events during pregnancy, labour and delivery consist of things like conditions that the woman experienced during pregnancy that can predispose her to puerperal sepsis. For example, anaemia in pregnancy, which reduces immunity hence predispose one to puerperal sepsis. During labour and delivery, things like episiotomy which if not performed under sterile procedure can introduce infection in the vagina. Also when one has stayed long in labour thus more than 12 hours can also predispose her to puerperal sepsis. All these will increase puerperal sepsis prevalence (Figure 1).

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 STUDY DESIGN

The study design is going to be a qualitative. This is influenced by the purpose and objectives of the study as the researcher would like to explore the causes of high prevalence of puerperal sepsis. Therefore, this design is ideal because it allows studying the phenomena as it occurs.

4.2 SETTING

The study will be conducted at Koche Health Centre in Mangochi District. This site has been chosen because of the high prevalence of puerperal sepsis cases it has compared to other health centres of the same catchment population in Mangochi.

4.3 SAMPLING

The sample will contain ten post natal women who have ever suffered or are suffering from puerperal sepsis at Koche Health Centre. This is because a qualitative study looks at the phenomenon itself rather than figures hence what ten people will give will equally be applicable to the whole community. The sample will be drawn using purposive sampling method. This is because participants shall be selected for the purpose of describing an experience in which they have participated (Speziale, Streubert, & Carpenter, 2011). Choosing the purposive sample is fundamental to the quality of data gathered; thus, reliability and competence of the participant must be ensured since they have an experience (Tongco, 2007).

4.4 PILOT STUDY

Pilot study shall be done at the same facility, Koche Health Centre on three postnatal women who have suffered or are suffering from puerperal sepsis. This will help to test the effectiveness of the interview guide. It will also help to ensure feasibility of the study (Elo & Kyngäs, 2008).

4.5 DATA COLLECTION

In this study, data will be collected using semi-structured questionnaire as a guide during a face to face interview with the participant (Appendix 1A). This interview guide will be translated in Chichewa for easy communication (Appendix 1B). Before the interview an implied consent form (Appendix 2A) shall be signed by the participant after a description of what the study entails. The consent form will also be translated in chichewa for easy communication (Appendix 2B). A definition of any terms that would not be universally known, risks and benefits, time commitment, confidentiality, voluntary participation, instructions in this study as well as contact information of the researcher shall also be included.

4.6 DATA ANALYSIS AND MANAGEMENT

Data shall be analysed using content analysis which is one of the qualitative analysis techniques to classify words into a few categories chosen because of their theoretical importance (Elo & Kyngäs, 2008). Data will be well managed to ensure privacy and confidentiality of the participants. It will not be exposed unnecessarily, rather it will be kept in a well locked drawer so that no one can see it hence maintain the dignity of the participants at the same time the objectives of the study being achieved.

4.7 ETHICAL CONSIDERATIONS

Before conducting the study, permission will be sought from Kamuzu College of Nursing Research and Publication committee (Appendix 3) to scrutinize the intent and process of the research with an aim of ensuring that participants are protected from harm. In addition to this, relevant authorities will be notified of the intention to carry out the study like: The District Health Officer (Appendix 4) and Health Centre In-charge (Appendix 5).

Participants shall be informed in advance about the overall purpose of the research and its main features, as well as the risks and benefits of their participation in this study. Consent shall be obtained in writing from participants who feel they can take part in the study after considering the terms and condition of the study.

This study shall be conducted in such a way that no participant shall be subjected to harm and that information given from participants shall be highly confidential and private. There will be no names involved as a measure of keeping it confidential. It will only be used for the accomplishment of the study objectives and not setting the participants up.

4.8 DISSEMINATION OF THE RESULTS

After data analysis, a copy of dissertation will be submitted to the faculty of Nursing at Kamuzu College of Nursing because the study is in partial fulfillment of the degree in nursing which the researcher is undergoing. In addition to this it will help to promote a better understanding of puerperal sepsis prevalence hence provide evidence based care to help reduce maternal morbidity and mortality.

The copy of the dissertation will also be made available to the District Health Officer and Koche Health Centre because thus the area in which the study was done. Also, the findings in this study will help bring awareness amongst the health workers and people in that community which will act as a first step in behaviour change towards reducing maternal morbidity and mortality due to puerperal sepsis.

4.9 WORK PLAN

The study is expected to run from July to October, 2013 (Figure 2). The proposal shall be submitted to Kamuzu College of Nursing Research and Publications Committee by 26th August, 2013. Final feedback from these authorities shall have to be by 5th September, 2013 and then data collection to be conducted by 22nd September, 2013 (Figure 2).

ACTIVITY	RESPONSIBLE PERSON	JULY	AUG	SEPT	OCT
Preparation	Lusekero	14 TH JULY, 2013			
Proposal writing	Lusekero		26 TH AUG, 2013		
Full proposal submitted to KCN RPC	Lusekero			30 TH AUG, 2013	
Final feedback from KCN RPC	Lusekero			5 TH SEPT, 2013	
Data collection	Lusekero			22 ND SEPT, 2013	
Data analysis	Lusekero				4 TH OCT, 2013
Dissemination of findings	Lusekero				18 TH OCT, 2013

FIGURE 2: WORK PLAN

4.10 BUDGET

The total cost for the study is MK87, 360 (Figure 3).

Stationery

Paper will be used for printing questionnaire, proposals, dissertation, writing letters as well as consent forms for participants. Envelopes will be used for sending letters asking for permission to go ahead with the study and for various communications. Lever arch file will be used to keep the questionnaires, proposal and other relevant paper work. This will add up to MK18000 (Figure 3).

Secretarial services

The money budgeted on these will be used to pay for printing and binding of questionnaires, proposals, dissertation and others. This will add up to MK6, 860 (Figure 3).

Transport and communication

This money will be used to pay for transport when collecting data, meetings, and phone calls to the supervisor for consultations. This will add up to MK20, 000 (Figure 3).

Food and accommodation

The money budgeted for this will be used for lodging during the period of the study. This adds up to MK25, 000 (Figure 3).

Incidentals

The amount of money budgeted here will be used in case of emergencies during the study. This will add up to MK20, 000 (Figure 3).

ITEM	QUANTITY	AMOUNT PER ITEM	TOTAL AMOUNT
Plain paper	2 Reams	3500 x 2	7000
Ball point pens	10	200 x10	2000
Pencils	2	50 x 2	100
Rubber	1	250	250
Tippex	2	500 x 2	1000
Small envelops	10	150 x 10	1500
Big envelops	10	250 x10	2500
Pencil sharpeners	2	100 x 2	200
Lever arch file	1	500	500
Stapling machine	1	700	700
Staple pins	1 Box	250	250
Punching machine	1	2000	2000
Printing a proposal	2 copies (44 pages)	20 x 88 pages	1760
Binding proposal	2copies	500 x 2	1000
Photocopying questionnaires	15 copies (2 pages)	20 x 30 pages	600
Printing dissertation	2 copies	-	3000
Binding dissertation	2 copies	-	500
Transportation to and fro data collection area	5 days	20 000	20 000
Phone calls	-	-	10 000
Internet services		10 000	10 000
Food and accomodation	5 days	5000 x 5	25 000
Incidentals	-	-	20 000
TOTAL			87360

FIGURE 3: BUDGET

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6. APPENDICES

APPENDIX 1A: INTERVIEW GUIDE

1. How old are you?
2. What is your occupation?
3. If no occupation, how do you earn your living?
4. What is your academic qualification?
5. What is your marital status?
6. What do you know about puerperal sepsis?
 - a. Have you ever suffered from it?
 - b. What do you think was the source of illness?
7. How did you experience your pregnancy, labour and delivery?
 - a. Did you experience anything unfavourable during pregnancy e.g. anaemia e.t.c
 - b. How was your nutrition status during pregnancy?
 - c. Any history of pica?
 - d. What was the mode of delivery of your baby?
 - e. If caesarean section, how did you take care of your wound?
 - f. How long did you take during labour before the baby was delivered?
 - g. Was there any procedure performed during labour and delivery, e.g. episiotomy?
8. What are your cultural practices towards;
 - a. pregnant woman?
 - b. woman in labour and delivery?
 - c. post natal woman?
9. Where did you deliver your baby?
10. How clean was the place for delivery of your baby?

11. How is infection prevention measures practiced in labour and post natal wards?

- a. Is there a sink for hand washing?
- b. How are episiotomies cared for in postnatal ward?

APPENDIX 1B: MAFUNSO

1. Muli ndi zaka zingati?
2. Mumagwira nchitho yanji?
3. Ngati simuli pa nchitho, ndalama mumazipeza bwanji?
4. Kodi sukulu munasiyira muchani?
5. Muli pa banja?
6. Mukudziwapo chani za matenda ogwira ziwalo za ubereki za amayi panthawi yimene achira kufikira masabata asanu ndi imodzi?
 - a. Munayamba mwadwalapo?
 - b. Mukuganiza chinayambisa matendawo ndi chani?
7. Uchembere wanu unali wotani?
 - a. Munakumanako ndi zovuta zotani, kusoweka magari?
 - b. Madyedwe anu anali otani nthawi imene munali ndi pakati?
 - c. Panali zokudya zina zimene mumazikonda kwambiri ndi mimba?
 - d. Mwana wanu munabereka bwanji?
 - e. Ngati munakaberekeru ku mpeni, bala lanu mumalisamalira bwanji?
 - f. Munatenga nthawi yayitali bwanji musanachire kuyambira pamene matenda anayamba?
 - g. Munapangidwako china chilichonse nthawi ya kuchira kwanu, ngati kuonjezera njira?
8. Zikhulupiliro zanu nzotani pankhani ya mzimayi
 - a. Wa mimba?
 - b. Amene ali kuchira?

- c. Amene wachira?
9. Kodi munakachilira kuti?
10. Malo ake anali osamalika bwanji?
11. Kodi malo ochilira ndi malo omwe amasungako azimayi ochira amachita bwanji pa nkhani ya kupewa matenda?
- a. Kodi pali malo osambira mmanja?
 - b. Kodi amene awonjezeredwa njira, amasamalika bwanji mu wodimo?
 - c. Kodi amene achilira mpeni, amasamalika bwanji mu odimo?

APPENDIX 2A: CONSENT FORM

I hereby give my full consent by signing this paper to be interviewed by Lusekero Mboma, a second year post basic student from Kamuzu College of Nursing who is conducting a study to explore the causes of high prevalence of puerperal sepsis at Koche Health Centre.

I have been told of the terms and conditions of the study, that my participation in this study is voluntary and that i may reconsider to withdraw from the study at any point when I feel like so. I have been assured of the privacy and confidentiality of the information that i will give in this study.

PARTICIPANT'S SIGNATURE

DATE.....

INVESTIGATOR'S SIGNATURE

DATE

Appendix 2B: CHILOLEZO

Ndikupereka chilolezo chotengapo gawo pa kafukufuku amene akupangisa Lusekero Mboma, wophunzira wa chaka chachiwiri pa sukulu ya ukachenjede ya unamwino ya Kamuzu. Ndidzayembekezeka kuyankha mafunso omwe adzaperekedwe panthawi ya kafukufukuyu amene akufufuza zopangisa matenda a ziwalo za ubereki za amayi kuyambira nthawi imene achira kufikira masabata asanu ndi imodzi. Ndinenso omasuka kusiya kutenga nawo mbali ngati ndaona kuti sindingathe kupitiriza kafukufukuyu palibe adzandiimbe mlandu pakutero. Adzasunga chinsisi pa zomwe ndiauze ndipo palibe wina aliyense adzathe kupeza zonsezi, popanda chilolezo changa. Sagwiritsa ntchito dzina langa pa mayankho onse omwe ndipereke.

Ndamva zonse zokhuzana ndi kafukufuku ameneyu ndipo ndikuvomera kulowa nawo wopanda kuumilizidwa.

Saini ya wotenga mbali.....

Tsiku.....

Saini ya wopangisa kafukufuku.....

Tsiku.....

APPENDIX 3: LETTER TO RESEARCH AND PUBLICATIONS COMMITTEE

University of Malawi

Kamuzu College of Nursing

P/Bag 1

Lilongwe

12th September, 2013

The Research and Publications Committee

Kamuzu College of Nursing

P/Bag 1

Lilongwe

Dear Sir / Madam

APPLICATION FOR PERMISSION TO CONDUCT A STUDY AT KOCHHE HEALTH CENTRE, MANGOCHI

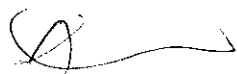
I am a second year mature student at Kamuzu College of Nursing studying for a Bachelor of Science in Community Health Nursing. In partial fulfillment for the award of the degree, I'm required to conduct a research exercise on a topic of my choice. My interest is on causes of high prevalence of puerperal sepsis at the above mentioned site.

It is my hope that the findings will benefit Koche Health Centre, the district Hospital and the nation at large in reducing maternal mortality and morbidity secondary to puerperal sepsis. The study is expected to take place during the month of September, 2013.

The purpose of this letter is therefore to request for your permission to carry out this study.

I am looking forward to your response.

Yours Faithfully,



LUSEKERO MBOMA.

APPENDIX 4: LETTER TO MANGOCHI DISTRICT HEALTH OFFICER

University of Malawi

Kamuzu College of Nursing

P/Bag 1

Lilongwe

12th September, 2013

The District Health Officer

Mangochi District Hospital

Mangochi

Dear Sir/Madam,

APPLICATION FOR PERMISSION TO CONDUCT A STUDY AT KOACHE HEALTH CENTRE

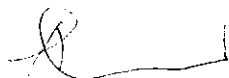
I am a second year mature student at Kamuzu College of Nursing studying for a Bachelor of Science in Community Health Nursing. In partial fulfillment for the award of the degree, I'm required to conduct a research exercise on a topic of my choice. My interest is on causes of high prevalence of puerperal sepsis at the above mentioned Health Centre.

It is my hope that the findings will benefit Koche Health Centre, the district as a whole and the nation at large hence help reduce the rate maternal morbidity and mortality. The study is expected to take place during the month of September, 2013.

The purpose of this letter is therefore to request for your permission to carry out this study.

I am looking forward to your response.

Yours Faithfully,



LUSEKERO MBOMA.

APPENDIX 5: LETTER TO KOCHE HEALTH CENTRE INCHARGE

University of Malawi
Kamuzu College of Nursing
P/Bag 1
Lilongwe

12th September, 2013

The Health Centre In-charge

Koche Health Centre

Mangochi

Dear Sir/Madam,

APPLICATION FOR PERMISSION TO CONDUCT A STUDY AT KOCHE HEALTH CENTRE

I am a second year mature student at Kamuzu College of Nursing studying for a Bachelor of Science in Community Health Nursing. In partial fulfillment for the award of the degree, I'm required to conduct a research exercise on a topic of my choice. My interest is on causes of high prevalence of puerperal sepsis at your facility.

It is my hope that the findings will benefit Koche Health Centre, the district as a whole and the nation at large hence help reduce the rate of maternal morbidity and mortality. The study is expected to take place during the month of September, 2013.

The purpose of this letter is therefore to request for your permission to carry out this study.

I am looking forward to your response.

Yours Faithfully,



LUSEKERO MBOMA.