FACTORS THAT ARE ASSOCIATED WITH ADOLESCENT'S HEALTH SEEKING PRACTICES DURING PREGNANCY IN BLANTYRE RURAL

MSc (MIDWIFERY) THESIS

CHRISTINA RUTH MBIZA

UNIVERSITY OF MALAWI
KAMUZU COLLEGE OF NURSING

MARCH, 2011

FACTORS THAT ARE ASSOCIATED WITH ADOLESCENT'S HEALTH SEEKING PRACTICES DURING PREGNANCY IN BLANTYRE RURAL

MSc (MIDWIFERY)

BY

CHRISTINA RUTH MBIZA

B.ED (Nursing) - University of Malawi

A Thesis Submitted To The Faculty of Nursing and Midwifery, Kamuzu College of Nursing,

In Partial Fulfillment of the Requirements for the Degree of Master of Science (Midwifery)

University of Malawi

Kamuzu College Of Nursing

March, 2011

DECLARATION

I the undersigned hereby declare that this thesis is my own original which has not been submitted to any other institution for similar purposes. Where other people's work has been used acknowledgement has been made.

Christina Ruth Mbiza

_____

_____

Signature

_____

Date

CERTIFICATE OF APPROVAL/ CERTIFICATION

The undersigned certify that this thesis represents the student's own work and effort and has been submitted with our approval.

Signature: _____ Date:_____

Abigail Kazembe PhD (Senior Lecture)

Main Supervisor

Signature: _____ Date: _____

Andrew Simwaka (Lecture)

Co Supervisor

DEDICATION

To my husband Alphonso, children Agness, Alphonso Jr, and Mwisho. To my mother Edith and father McDonald George, sisters, brothers, nieces, and nephews and in loving memory of my dearest brother Francis Chapotela.

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude and appreciation to the following people for the help and support that made this study possible:

- Dr A. Kazembe, my research supervisor, senior lecturer in the Maternal and Child Health Department, who gave up much of her time in providing guidance, support, and expertise, which made my research challenging and an enjoyable experience.
- Mr A. Simwaka my co supervisor, Lecture, Department of basic studies, for his comments and constructive suggestions towards the study.
- Dr E. Chirwa, Dr A. Chimwaza, Research Process and Statistics module lectures for the knowledge imparted and their guidance. Mr M. Ngwale, Lecturer in Statistics and Mr Mkanaunena for statistical assistance.
- The Ministry of Health, for granting me a scholarship and financial support for this study. The management of QECH, for granting me study leave and support.
- The Blantyre DHO, for granting me permission to conduct a study in the district.
- KCN Blantyre Campus library staff and my colleagues, the first Masters in Midwifery class at KNC for their support in the literature search; this has assisted me in the write up of the thesis.
- My relatives, husband Alphonso, and my children Agness, Alphonso Jr and Mwisho for their untiring support, cooperation, understanding, and patience which made this study a success.
- Above all, I give thanks to Almighty God for life, health strength and wisdom.

ABSTRACT

Strategies to improve the pregnant adolescent's health need clear understanding of the patterns and determinants of the adolescent's health seeking practices. This research study, guided by Kroeger Model, explored factors that are associated with adolescent health-seeking practices during pregnancy in Blantyre rural. The study objectives were to assess individual factors that are associated with adolescent's health-seeking practices during pregnancy, determine psychological factors that are associated with adolescent's health-seeking practices during pregnancy, and to identify health service factors that are associated with adolescent's health-seeking practices during pregnancy.

A descriptive quantitative design was used. A total of 240 pregnant adolescents and adolescents who delivered within the previous 6 months, aged between 13 and 19 years were selected using Purposive sampling. Data was collected using a structured interview guide and analyzed using SPSS version 16.0.

The results identified individual, psychological and health service factors that hinder adolescent's health-seeking practices during pregnancy. The individual factors were low level of education 72.5%, inability to make decisions as regards to care 73.8%, inadequate knowledge 44.16 % related to health seeking practices, under age 40.8%, and marital status 30 %. The psychological factors were shyness 85.8%, fear 84.2%, reluctance to open up 50.8 %, denial and concealed pregnancy 49.6%, and stigma, 34.2%. The health service factors were transport 80.4%, distance 79.2%, a lack of provision of adolescent friendly services 72.5%, and inaccessible roads 62.9%. The factors found to promote health seeking practices were provider's sensitivity on adolescent's issues 44.6%, free services 19.2%, skilled care 6.3%, and trust 6.3%.

The factors identified can provide a basis for improving the services there by promoting adolescent health seeking practices during pregnancy. The study recommends that health education and counseling of pregnant adolescents should be strengthened. Efforts to increase the adolescent's status and decision-making power should be made through community mobilization by empowering adolescents, parents, and the community with knowledge about adolescent's pregnancy. There is need to establish and/or make existing health facilities more youth friendly and ensure that policies regarding pregnant adolescents are being implemented. Every effort should be made to facilitate accessibility of pregnant adolescent services.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACCRONMYS

AGI	Alan Guttmacher Institute
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
CCAP	Church of Central Africa Presbyterian
COMREC	College of Medicine Research and Ethical Committee
DHO	District Health Office
DHS	Demographic Health Survey
EOC	Emergency Obstetric Care
FANC	Focuses Antenatal Care
FCI	Family Care International
HIV	Human Immuno Deficiency Virus
HMIS	Health Management and Information System
HAS	Health Surveillance Assistant
ICPD	International Conference for Population Development
KCN	Kamuzu College of Nursing
MOH	Ministry of Health
NSO	National Statistics Office
QECH	Queen Elizabeth Central Hospital
RC	Roman Catholic
RHS	Reproductive Health Services
SPSS	Statistical Package for Social Sciences
STI	Sexually Transmitted Infections
SRH	Sexual Reproductive Health
SWAP	Sector Wide Approach

TBA	Traditional Birth Attendant
UNICEF	United Nations International Children Emergency
UNFPA	United Nations Population Fund
USA	United States of America
WHO	World Health Organization
YFHS	Youth Friendly Health Service

CHAPTER ONE

Introduction

Pregnant adolescents require positive health seeking practices to meet their personal, physical, psychological, and/or social health needs. Effective strategies to improve pregnant adolescent's health need clear understanding of the patterns and determinants of adolescent's health seeking practices. Adolescent pregnancy is common in many countries (WHO, 2007). Globally an estimated 14 million women aged 15 – 19 years give birth each year. More than half of the women in sub-Saharan Africa give birth before the age of 20 (Kirchengast, 2009; WHO, 2007). In Malawi, adolescent pregnancy rate is at 19.3% (NSO, 2010). However, adolescents are more constrained than adults in seeking timely and appropriate care. Many factors play a role in influencing the health-seeking practices of pregnant adolescents. Limited data on adolescent's health seeking practices is available in sub-Saharan Africa (WHO, 2007) and even in Malawi (Munthali, Chimbiri & Zulu, 2005). Formative research is critical to determine how these factors can modify adolescent's health-seeking practices during pregnancy to increase demand for timely use of reproductive health (RH) services.

Background Information

Pregnancy is a serious biological and psychosocial problem for adolescents. It is a public health concern which contributes to maternal morbidity and mortality. Adolescents poor health seeking practices during pregnancy lead to high maternal morbidity and mortality rates (Atuyambe, Mirembo,Johanson, Kirumira & Faxelid, 2005). For every 100,000 live births, women in the developing world are 22 times more likely than those in developed countries to die during and after pregnancy. The risk of dying from pregnancy related causes are twice as high as women aged 15—19 years (WHO,2003)

and five times higher for girls aged 10-14 years, than those in their twenties (WHO, 2007).

In Malawi, a substantial proportion of women give birth during their adolescence (NSO, 2010). The age specific fertility rates for adolescents aged 15 and 19 for Malawi is 0.193. In the three regions of Malawi, central region is the highest at 0.206, seconded by northern region at 0.196 and then southern region at 0.178. In Blantyre rural, the age specific rate is at 0.173 (NSO, 2010).

Additionally, adolescents are not utilizing reproductive health services. For instance, antenatal care coverage for both adolescents and adult women in Malawi during the first trimester is only 6% (MOH, 2008). Reasons for poor utilization of antenatal services are not known. However, adolescents rarely seek reproductive health services during pregnancy probably because they may not recognize the signs of pregnancy or are in denial (Allender & Spandley, 2006). For instance, out of 964 adolescents who have begun child bearing in M'deka, Mpemba, and South Lunzu, only 264 adolescents utilized antenatal services in 2008 (S. Malora, personal communication, October, 2009).

Adolescents worldwide, particularly in the sub-Saharan Africa, encounter significant obstacles to receiving reproductive health services during pregnancy**.** Although adolescents have reproductive health needs, many rarely use health services. They tend to use sources of informal care (Jaruceviene & Levasseur, 2006). Adolescent's preferences and use of informal services, especially during pregnancy, need to be understood and addressed to improve their health, especially during pregnancy. In sub-Saharan Africa, and Malawi in particular, many adolescents start antenatal care late and others attend only once thereby limiting the care provided **(**Brabin, 1998; Ikamari, 2004;

WHO, 2007). A study in southern Malawi showed that about 33% of pregnant adolescents attended a clinic at 20–23 weeks compared with multigravidas at the same gestation (Brabin, 1998). They are less likely to seek health services early because they do not recognize signs of pregnancy or deny being pregnant. It takes 3 to 4 months into pregnancy before they admit it and seek out health services (Allender & Spandley, 2006). Prenatal care is therefore delayed into the second trimester of pregnancy (Allender & Spandley, 2006). Delay in seeking care hampers the delivery of effective antenatal care potentially contributing to maternal morbidity and mortality (Barker, 2007).

Many adolescents are less likely to seek formal health services early even when the services are available. An exploratory study in the area of Garankuwa in South Africa on adolescent mothers' perceptions of Reproductive Health (RH) services of 50 adolescents within the age of 16-17 showed poor attendance at antenatal clinics by 60% of adolescent mothers despite clinics being within walking distance.

Although respondents did not give reasons for their poor attendance, the majority were still at school. They may have attempted to continue with their schooling and experienced problems in attending antenatal clinic after school (Ehlers & Maja, 2001).

Maternal care rates tend to be low with high maternal mortality rates in areas where women have low status with poor access to routine health services (WHO, 2007). In Malawi, there is a substantial difference in child bearing between adolescents who live in urban and rural areas. According to NSO (2005) the proportion of child bearing adolescents is 25% in the urban areas as compared to 36% in the rural areas. In Blantyre, urban adolescents have age specific fertility rates of 0.137, compared to age fertility rate of 0.173 among their rural counterparts (NSO, 2010). However, women in rural areas are

less likely than urban women to go for antenatal services because of poor social, economic, and cultural backgrounds (NSO, 2005). Further, there is no data on the proportion of adolescent mothers who seek antenatal services in the rural and urban areas.

Pregnant adolescents are affected psychologically. They have lower expectations for themselves and often experience stress, depression, low self-esteem, and social economic deprivation (Lowdermilk & Perry, 2006). These problems prevent adolescents from seeking care during pregnancy. Unmarried pregnant adolescents are considered an embarrassment for the family. They are either abandoned or chased away from home and left with no guaranteed means of support for their well-being. This shows that they are socially constrained from seeking timely and appropriate health care during pregnancy.

Pregnant adolescents face a number of challenges when trying to seek reproductive health services such as cost, health provider's negative attitudes, and a lack of confidentiality. A study done in Uganda found that adolescents are significantly more disadvantaged in terms of health seeking for reproductive health services and they face more challenges during pregnancy and early motherhood as compared to adult mothers (Atuyambe, Mirembo, Johanson, Kirumira & Faxelid, 2009).

Very little research has been conducted in Malawi to understand health seeking practices of pregnant adolescents. Additionally, limited studies to explore factors that are associated with adolescent's health seeking practices during pregnancy have been done globally and in Malawi. It is therefore of crucial importance to broaden the evidence on adolescent's health seeking practices during pregnancy. The purpose of this study is to explore the factors that are associated with adolescent's health- seeking practices during pregnancy in Blantyre rural.

Problem Statement

Adolescents are not adequately utilizing reproductive health services during pregnancy (WHO, 2003). Their health seeking practices are very poor. Pregnant adolescents are also prone to physical, social, and psychological consequences. They need timely and appropriate care to prevent these consequences. Many of these health consequences are associated with poor health seeking practices. There are factors that are associated with adolescent's poor health-seeking practices. Very little research has been conducted in Malawi to understand the factors that are associated with health-seeking practices of pregnant adolescents. Understanding these factors is critical for it is an opportunity to improve adolescent's well-being during pregnancy.

Significance of the Study

Understanding adolescent's health seeking practices is critical for improving adolescent's reproductive health and contributing towards a body of knowledge. The study will assist in identifying factors that are associated with adolescent's health seeking practices during pregnancy. The study will help reproductive health care providers to improve practice and in the management of adolescents during pregnancy. The results will help policy makers and educators in the formulation of best strategies for empowering adolescents to value the importance of positive health seeking practices. Furthermore, the study will raise issues for further research hence improving adolescent's reproductive health services.

Conceptual framework

Frameworks are efficient mechanisms for drawing together and summarizing accumulated facts. The linkage of findings into a coherent structure makes the body of

accumulated knowledge more accessible and, thus, more useful both to practitioners who seek to implement findings and to the researchers who seek to extend the knowledge (Polit & Hungler, 1999). The theoretical approach advanced by Kroeger (1983) guides in exploring health seeking behaviors. The model identifies a variety of factors, which are organized into three major components and are affected by perceived morbidity. These major components guide in the use of care. The first component is characteristics of the individual or predisposing factors. The second component is characteristics of a disorder and individual's perception of the disorder that include chronic, acute, severe or slight, etiological model, and expressed benefits. The third component is characteristics of a service. These are health system factors and enabling factors. The interaction of all the three components is theorized to guide the choice of health care resource utilization.

Application of Kroeger Model (1983)

An adaptation of the Kroeger model guides this research study. In order to utilize the model in this study, some of the main concepts from the theoretical framework of Kroeger (1983) were modified. In this study the concept, perceived morbidity is defined as adolescent pregnancy and its related ailments. Individual factors refers to characteristic of an individual, psychological factors refers to individual and perception of the disorder, and characteristics of a service refers to health system factors.

Operational Definitions of the Components

individual factors.

These are demographic factors such as age, education, occupation, marital status, and knowledge. They also reflect social, cultural, and economic factors such as lack of support, cost, and personal autonomy or decision-making capabilities.

psychological factors.

They include fear or feeling afraid, embarrassment, low self-esteem, depression, and social stigma.

health service factors.

They include accessibility, availability, quality, and acceptability of the service, privacy, waiting time, and cost. They also included characteristics of the provider such as judgmental and friendly attitudes, trust, respect, and confidentiality. The modified theoretical model is diagrammed below. See figure 1

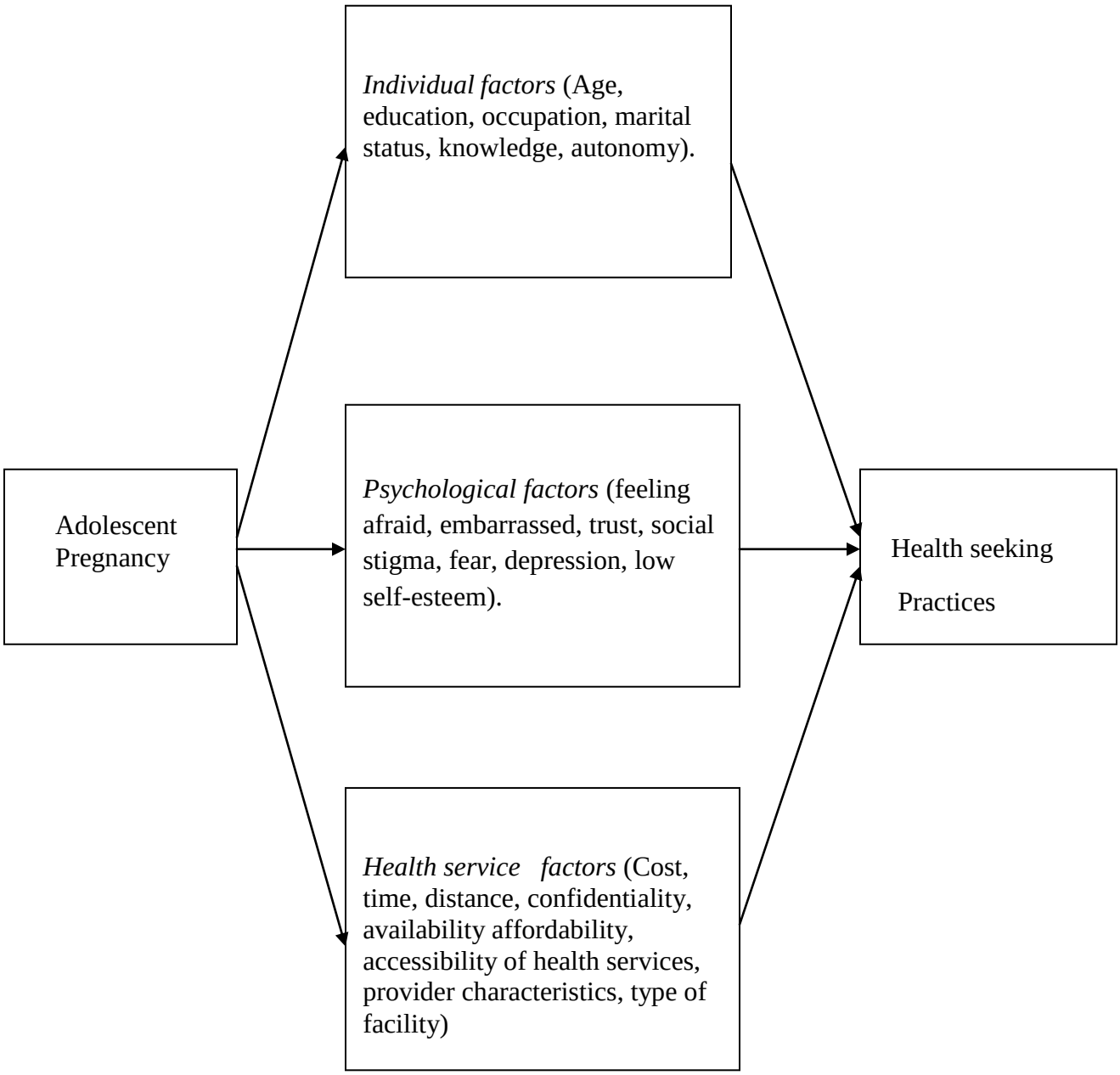


Figure 1: *Adapted Kroeger Model of Pregnant adolescents' health seeking practices*.

Source: (Kroeger, 1983).

The Adapted Kroeger Model contends that adolescent pregnancy and its related ailments interact with the three main components; individual factors, psychological factors, and health service factors to guide pregnant adolescent's health seeking practices. These three main complex networks of explanatory variables are potential factors that are associated with pregnant adolescent's health seeking practices. The interaction of these factors either promotes or hinders pregnant adolescent's health seeking practices.

Study Objectives

Broad Objective

The broad objective is to explore factors that are associated with adolescent's health seeking practices during pregnancy.

Specific Objectives

The specific objectives of the study were to:

- Assess individual factors that are associated with adolescent's health seeking practices during pregnancy.
- Determine psychological factors that are associated with adolescent's health seeking practices during pregnancy.
- Identify health service factors that are associated with adolescent's health-seeking practices during pregnancy.

Operational Definitions

Adolescents: Young people, female or male aged 10-19 years (WHO, 2004).

Pregnant adolescent: Pregnancy in a woman aged of 10 –19 years (WHO, 2004). In this study refers to pregnancy in a woman aged 13-19 years.

Health seeking practices: Actions or activities carried out by an adolescent who perceives herself as needing personal, psychological, effective assistance, social health or services (Barker, 2007).

Knowledge: Level of awareness amongst adolescents about health seeking practices during pregnancy.

Attitudes: Individual's positive or negative feelings towards a situation

Antenatal care: Antenatal care means care rendered to a pregnant woman and her fetus from conception to the onset of labor (MOH, 2008).

Autonomy: The capacity to make informed decisions.

Confidentiality: Ensuring that information is accessible only to those authorized to have access.

Reproductive Health: A state of complete physical, mental and social well-being and not merely the absence of disease and infirmity in all matters relating to the reproductive system and to its functions and processes (ICPD, 1994).

Stigma: A mark of disgrace that sets a person apart from others.

Youth friendly services: According to Ministry of Health (2006), Youth Friendly Services are Services that are relevant, accessible, affordable, appropriate, and acceptable to the youth.

CHAPTER TWO

Literature Review

Introduction

In this chapter, studies on pregnant adolescent's health seeking practices are reviewed. The literature review highlights studies done on individual, social economic, psychological, and health services factors that hinder or promote adolescent's health-seeking practices during pregnancy. The literature was reviewed to gain understanding on factors that are associated with health seeking practices of adolescents during pregnancy. The Kroeger model (1983) was presented as a conceptual framework for this study and the literature review will be organized consistent with the study objectives derived from the components of the model.

Adolescent Pregnancy

Adolescents form one of the largest groups with unmet needs for reproductive health services (WHO, 2007). Globally adolescents make up one-fifth of the world's population, which is over a billion people and 86% live in developing countries of which 16% live in Africa. In Malawi, adolescents aged 15 to 19 make up 10% of the women which is over half a million people (NSO, 2010). Additionally, culturally determined sexual practices are common among unmarried adolescents (UNFPA, 2003; Munthali, et al. 2005). Although most unmarried adolescents are sexually active, many of them do not use prevention measures for SRH problems (Save the Children UK, 2000). Because of such unsafe sexual practices, most adolescents in Malawi are vulnerable to early pregnancies (UNFPA, 2003). Adolescent pregnancy is common in many countries. As previously noted, an estimated 14 million women aged 15–19 years gave birth each year.

This accounts for slightly more than 10% of all adolescents births worldwide (UNICEF, 2001; The Alan Guttmacher Institute, 2000). In developing countries, more than one third of women gave birth before the age of 15 (UNICEF, 2001; Singh, & Darroch, 2000; Alan Guttmacher Institute, 2000). Ten years ago Singh (1998) analyzed adolescent childbearing in 43 developing countries. This review yielded highest levels of adolescent childbearing in the countries of sub-Saharan Africa, a situation which has not changed until today (Kirchengast, (2009). Even ten years later teenage birth rates are extraordinarily high in many developing countries (Moultrie & McGrath, 2007). For instance, the teenage birth rates range from 8% in East Asia to 55% in Sub-Saharan Africa depending on cultural factors, such as religion, female education, and/or access to contraceptives (Mayor, 2004; Kirchengast, 2009). In Malawi, as previously noted, age specific fertility rate for adolescents aged 15 and 19 is at 0.193 meaning that out of a thousand adolescents, 193 have started child bearing (NSO,2010).

Adolescent pregnancies and births carry higher risks for both the mother and the newborn. According to UNFPA (2003) early childbearing can increase adolescents' risks to health problems during pregnancy. Additionally, complications from pregnancy and childbirth are a leading cause of death for young women aged 15-19 in developing countries (Save the children, 2004). Those living in Sub-Saharan Africa account for 13% of the global burden of disease, among this age group (WHO, 2007). This indicates the enormity of the problem in many countries. Many of the health problems associated with adolescent pregnancy and childbearing can be prevented and controlled with positive health seeking practices (Zabin & Kiragu, 1998).

Health Seeking Practices

Health seeking practices refer to any activities undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy (Ward, Mertin, & Thomas, 1997). This is therefore a sequence of remedial actions that individuals undertake to rectify perceived illnesses. It is initiated with symptom definition upon which a strategy for treatment is devised. Adolescents are generally believed to be healthy because death rates for this age group are lower than those of children or older people. However, there are many interrelated reasons why there is need to pay attention to the health of adolescents, especially adolescent girls to prevent current, later life, and future generation's health concerns (Atuyambe, Milembe, Annika, Kirumira, & Flaxed, 2008). In developing countries, young people are less willing to seek professional help for more sensitive matters and turn more readily to friends or family whom they feel that they can trust for sexual advice (Tylee, Haller, Graham, Churchhill & Sanci, 2007). During pregnancy, ANC improves some outcomes through the prevention, detection, and management of potential complications (Reynolds, Wong & Parker, 2006). Antenatal care provides an opportunity to empower pregnant adolescents to recognize and respond to the signs and symptoms of obstetric complications (Lawn & Kerber, 2006). In the past, emphasis was laid on a high risk approach to ANC which tended to classify pregnant women as low risk and high risk and involved many antenatal care visits.

Recently attention has been directed on Focused Antenatal Care (FANC) which provides evidence based interventions for all women, carried out at certain critical times in pregnancy. According to WHO (2002) essential elements of FANC are; identification

and surveillance of a pregnant woman and her expected child, recognition and management of pregnancy related complications, recognition and treatment of underlying or concurrent illnesses, screening for conditions such as anemia, STI's particularly syphilis, and HIV infection, preventive measures including Tetanus Toxoid Vaccine (TTV), de-worming, iron, and folic, Intermittent Preventive Treatment (IPT) of malaria in pregnancy, Insects Treated bed Nets (ITN) and, advice and support to the woman and her family for developing health home behaviors and birth and emergency preparedness (Lawn & Kerber, 2006). For routine ANC, WHO recommends four visits. The first visit at 16 weeks or below, second visit between 24 and 28 weeks, third visit at 32 weeks and forth visit between 36 and 38 weeks, with specific activities scientifically proven to be effective during each visit (WHO, 2002).

Several studies have revealed that the majority of pregnant adolescents make the first ANC visit only during the second and third trimester of pregnancy, while some deliver their babies without attending ANC at all (Ikamari, 2004). Pregnant and child birth related causes of morbidity and mortality among women aged 19 or younger could be improved through positive health seeking practices during pregnancy. Evidence indicates that insufficient ANC is related to complications among adolescents (Barker, 2007). Several factors such as low literacy level, inadequate knowledge, culture, and distance affect pregnant adolescent health seeking practices contributing to pregnancy complications (Matua, 2004). Many of the health problems associated with adolescent pregnancy and childbearing can be prevented and controlled with timely and appropriate care during and after the pregnancy (Zabin & Kiragu, 1998). It is important that adolescent's health seeking behaviors during pregnancy receives special attention.

Kroeger Model Conceptual Framework

A conceptual framework provides a broad understanding of the phenomena of interest, the assumptions, and the philosophical views of the model designer (Polit & Beck, 2006). The phenomenon under study is the pregnant adolescent's health seeking practices. The Kroeger model (1983) was used to guide the study.

The Kroeger model was developed to guide utilization of health services. Previous studies have used this model to examine factors that are associated with utilization of health services. A quantitative study done by Atuyambe et al (2008) on 742 subjects at Wakiso District in Uganda used Kroeger model as a framework. The model was used to examine adolescent and adult mothers' health seeking practices during pregnancy and early motherhood. The findings revealed that; adolescent mothers were significantly more disadvantaged in terms of health seeking for reproductive health services and faced more challenges during pregnancy and early motherhood as compared to adult mothers.

Deverlay, Saverborn, and Dresfled (1989) used the Kroeger model in a household health survey of 547 households at Ouagadougou in Burkina Faso. The study analyzed the level of utilization of different kinds of health care providers and its correlation to the people reporting an illness in an African Urban area. The findings showed that even though the family was the main provider of care in cases of minor illnesses, it did not prevent modern care facilities from playing their curative role in cases of serious illnesses. Residential zone was not significantly associated with health care choice. However, the bivariate analysis revealed that the determinants of modern care givers were; age, of social economic level, illness characteristic, cost care, and transport.

Sari (2009) used the model to explore social economic, and demographic factors that affect women's use of maternal health care on married women aged between 15-49 years of age in Indonesia. The results showed that woman's exposure to media, age, place of resident, and education had significant correlation with utilization of antenatal and modern delivery care. Bivariate analysis showed that almost all social, economic, and demographic variables were significantly associated with use of maternal health services. However, autonomy had a weak relationship.

Berker, Peters, Gray, Gultiano, and Black (1993) used the Kroeger model as a framework to the study to answer a question about how people enter the sick role and make choices regarding the use or non use of different kinds of health services. The study examined the patterns and determinants of use of maternal and child health services in the Phillipines in a household survey of 8,380 women aged between 15 and 52. The results revealed that there was greater use of maternal and child care services in the urban than the rural area. The determinants of the use of care were education, access to communication, physical access, and maternal work status. However, socio economic status had no effect on the use of antenatal care in the rural area. The survey further reported that clinic hours were inconvenient for many mothers.

Individual Factors

Individual factors such as age, marital status, and knowledge of positive health seeking practices are key determinants of maternal and infant outcomes, including maternal and infant mortality (Reynolds, Wong & Tucker, 2006).

Pregnant adolescent's age might influence their decision to seek care. Unadjusted analysis of DHS data found that women younger than 18 were less likely than women

aged 18–34 to seek antenatal care (Treffers, 2001). Furthermore, multivariable analysis of urban data from Bobo-Dioulasso, in Burkina Faso, and Bamako, in Mali, found that women younger than 18 were significantly less likely to seek early or any antenatal care than were women aged 24–39 (Reynolds, et al. 2006).

Young pregnant women often start antenatal care late in pregnancy. They often start in the second or third trimester or do not receive antenatal care at all (Reynolds, et al. 2006). In Europe, a study done in Dublin (Ireland), which described the profile of clients attending an adolescent antenatal booking clinic, found that the mean gestational age of first antenatal visit was 16.4 weeks and 24 percent of the girls came after more than 20 weeks (Fitzpatrick, Fitzpatrick & Turner, 1997). Similarly in Africa, a study done in Lesotho revealed that 71.3% of pregnant adolescents started ANC during the second trimester while 57% started during the third trimester (Phafoli, Van Asswegen & Albelts, 2007). Adolescents are four times less likely to attend ANC than adult mothers (Atuyambe, et al. 2009). Although the majority of both adolescents and adults attend ANC at least once, very few attend within the first three months of pregnancy (Barker, 2007). In the Philippines, Dela Cruz (1996) found a remarkably high incidence of adolescents who did not receive any antenatal care.

For the pregnant girls who were less than 18 years, only 29% received antenatal care, while those aged 20–30 was 81%. In India, Sarkar, Gin, and Sarkar (1991) reported that 38% of adolescent mothers did not receive antenatal care; percentages of older pregnant women were not reported.

Being unmarried is associated with poor health seeking practices. Unmarried pregnant adolescents are less likely to use antenatal care and seek later care than married

adolescents (Reynolds, et al. 2006; Treffers, 2001). A population-based study in a small village in Nigeria reported that pregnant adolescents, especially those who were unmarried, did not receive antenatal care. Similarly, a study in Kenya showed that more than one-third of unmarried pregnant girls attending school received no antenatal care, with 28% attending a clinic for the first time around the eighth month of pregnancy (Khasiani 1985, cited in Zabin & Kiragu, 1998). Pregnant adolescents try to continue with their schooling and experienced problems with attending antenatal clinic after school hours (Ehlers & Maja, 2001**).**

The fact that sex outside of marriage is a taboo contributed to a delay in early antenatal attendance (Phafoli, et al. 2007). Pregnancy out of wedlock is regarded as a disgrace to the girl as well as the parents (Phafoli, et al. 2007). According to the population-based study by Okonofua, et al. (1992) in a small village in Nigeria, unmarried girls do not want to be seen in public whilst pregnant. The solution is to arrange for marriage. A pregnant adolescent will probably not go to the clinic until the parents know whether she is going to get married (Phafoli, et al. 2007). Therefore, delay in seeking care may be due to marriage negotiations.

Excluding studies on prevention of pregnancy, little research exists on adolescent's knowledge of health seeking practices during pregnancy (WHO, 2007). Evidence has shown that poor health seeking practices and insufficient antenatal care is correlated with a lack of knowledge by adolescents regarding pregnancy complications (WHO, 2009) and the importance of early antenatal attendance (Phafoli, et al. 2007). Missed opportunities to identify pregnancy complications have been linked to a lack of knowledge about positive health seeking practices (Olds, et al. 2004; Swan, 2003).

Research has also suggested that younger women, aged 15 – 19, generally have low levels of awareness and information about reproductive health, puberty, sexual health, and the consequences of adolescent pregnancy (Nanda, 2003). This may lead to a delay in seeking care. A study on the health-seeking behavior of adolescents in South Africa indicated that young people tend to delay treatment because of the lack of knowledge on perceived seriousness of the symptoms and frequently they resort to self-treatment (Meyer-Weitz, Reddy, Ven den Borne, Kok, & Pietersen, 2000).

Common sources of information for adolescents are their peers (Mboye, Neema & Magnussen, 2005). Through information sharing, they are aware of the dangers of getting pregnant and the stress of pregnancy (Mboye, et al. 2005). However, they lack information regarding the dangers of poor health seeking practices and how these affect pregnant adolescents. Knowledge levels concerning pregnancy were also reported to be very poor (Singh, Devi, & Gupta, 1999, Agampodi, Agampodi & Piyaseedi, 2008).

Research has revealed that a large proportion of adolescents can correctly identify ways of preventing pregnancy and the importance of utilizing reproductive health services yet they do not utilize them (Ehlers & Maja, 2001). This illustrates that a lack of RHS is also a major concern among pregnant adolescents. Significantly, a study which was done in South Africa on problems associated with pregnancy among student nurses in the northern province of RSA showed that out of 93 pregnant student nurses only 44.1% attended antenatal clinic despite knowing the importance of attending these clinics (Netshikweta, 1999 as cited in (Ehlers & Maja, 2001).

There is ample evidence that knowledge improves health-seeking practices, resulting in lower rates of poor outcomes for a pregnant woman and her baby (WHO,

2007, Agampodi, et al. 2008). Community awareness and individual counseling about danger signals increase the use of health-care services (Gay, et al. 2003). Significantly, a situation analysis in Malawi has identified a knowledge gap on reproductive health among adolescents (MOH, 2008).

Personal autonomy is known to be a key determinant of a woman's ability to seek reproductive health services (Iyengar & Iyengar, 2000). Where adolescent's decision-making is restricted, health and illness rank low on the family's priority list. Decisions regarding health care for pregnancy and pregnancy-related complications may be delayed, often with significant health consequences (Barker, 2007).

The influence of limited autonomy on health-seeking behavior is of particular importance in both married and unmarried adolescents (Barker, 2007). Marriage also restricts an adolescent's decision to seek care (Mathur & Malhotra, 2001). Studies in South Asia, some Muslim countries, and parts of Sub-Saharan Africa revealed that the decision to seek health care is made by the husband, mother, mother-in-law, village elders, or other family or community members (Barker, 2007).

An Ugandan study found that men generally control the cash needed for transport and payment of health services (Kasolo 1991, cited in Kutzin, 2003). Pregnant adolescents often lack the autonomy to make health-care decisions for themselves (WHO, 2007). They require permission of other family members to make use of antenatal or delivery care (WHO, 2007). Adolescents value the opinions and advice of peers, family members, and the community on health seeking practices over that of health care providers (Barker, 2007). If the peers, the family, and even the community believe that informal health care services are more appropriate for them, they seek care from these

services (Agampodi, et al. 2008; Gibson, Diaz, Mainous, & Geesey, 2005).

The influential role of the mother-in-law with first pregnancy has also been reported in several studies (Barua & Kurz, 2001, Iyengar & Iyengar, 2000). In Malawi, a qualitative study, which was conducted by Safe Motherhood Project in the southern region, found that husbands are influential regarding a wife's pregnancy. On the other hand, in patrineal system of marriage, although the husband may challenge certain decisions, it is the mother in-law of a married pregnant adolescent who is a primary decision maker regarding pregnancy and childbirth (Matinga, 1998).

As previously noted, decisions made by family members may contribute to poor health seeking practices. In Bangladesh, a study on the use of contraceptives showed conflicting results. The results showed that women who realized the importance of positive health seeking practices encouraged their newly-wed adolescent daughters-in-law to use RH services because through community education, they realized the importance of utilizing RH services (Alauddin & MacLaren, 1999).

Studies in Uganda and the United Kingdom have shown that pregnant adolescents feel exposed and powerless due to the dilemma of early motherhood and a lack of decision making power therefore they seek health care from any source to obtain safety and empathy (Atuyambe, et al.; 2009; WHO, 2007; Wood & Aggleton, 2008).

Adolescents may lack the ability to seek help because of a lack of support. A study which was done at Chester, Pennsylvania revealed that adolescents with a strong social support system have high levels of self efficacy related to the practice of health related behaviors and have more ability for self care (Callaghan, 2005). Similarly, a study by Atuyambe et al. (2005) reported that adolescents with social support are problem-

focused therefore; they opt to seek health care during pregnancy and early motherhood.

Another major challenge reported by most key informants is the reluctance among adolescents to open up and discuss their SRH concerns when faced with an SRH condition that requires medical attention. A study in Kampala, Uganda, reported that most adolescents who were brave enough to seek services were hesitant to disclose their actual condition (Kibmobo, et al. 2008). Pharmacists concurred with the results and reported that some adolescents go to pharmacies and drug shops to buy a specific drug but refuse to reveal the condition they are going to treat, it was therefore difficult to give advice on the appropriate medicine (Kibmobo, et al. 2008).

Cultural beliefs on seeking health care are determined by the way diseases and conditions are perceived and subsequent actions taken (Bouwer, Dreyer, Heselman, Lock & Zeele, 1997). Cultural factors may limit or promote health care seeking behaviors among pregnant adolescents (Reynoids, et al. 2006). There may be cultural restrictions on girls consulting a male health-care provider, particularly in Muslim countries.
In Egypt, trained providers are available throughout the country, but most of them are male. In many cases, adolescents fail to seek treatment from these providers because of the belief that males should not examine them (WHO, 2007). A study at a teen clinic in Atlanta, Georgia revealed that cultural and language barriers were reasons why adolescents were not accessing formal health care (Woodruff, Zimmerli & Duncain, 2006). According to George (2002) traditional factors and cultural values influence individual's behaviors, thoughts, decisions and actions. For instant, family members may expect the pregnant adolescent to be under their care and deliver with the help of the TBA's without attending ANC (Irinoye , Adeyemo & Elojoba, 2002). In Bolivia, a study

which explored reluctance of adolescents to use formal western-based health services revealed that adolescents rarely used the services because the procedures contradicted their cultural beliefs (Chiarella, 1994).

Psychological Factors

Health seeking practices are influenced by psychological factors (Bowden and Manning, 2006). Within social psychology, it is reported that psychological factors are determined by beliefs and attitudes. These attitudes are vital aspects of behavior change because they influence change (Bowden & Manning, 2006; Proschaska, 2005; Semnett, 2003 & WHO, 2007). Studies that specifically examine psychological factors that are associated with pregnant adolescent's health seeking practices are limited. However, there are many psychological factors that are associated with health-seeking practices during pregnancy (WHO, 2007).

Adolescents frequently report feeling afraid, embarrassed, or shy to seek RH services (Biddlecom, Munthali, Singh, & Woog, 2008). Fear that others might get to know of their visit, shame about their needs, and social stigma are major psychological factors (Wood & Jewkes, 2006). A study in the USA revealed that pregnant adolescents have fear of being dismissed from school and chased away from home when it is known that they are pregnant by their teachers, parents, or the community. This fear drives them to hide their pregnancy and further limit their utilization of treatment and preventive services (Logan, Holcombe, Manlove & Ryan, 2007).

Stigma associated with adolescent pregnancy is related to delays in seeking treatment (Barker, 2007; Wood & Aggleton, 2008). In settings where premarital sexual activity among adolescents is stigmatized, the signs of unprotected sexual activity such as

unplanned pregnancy are highly stigmatized (Atuyambe, Milembe, Annika, Kirumira, & Flaxed, 2008). Stigma drastically reduces utilization of quality Sexual Reproductive Health Services (Wood and Aggleton, 2008). It also influences the source of help sought (Barker, 2007). A cross section survey, which was done in Bukina Faso, Ghana, Malawi, and Uganda, revealed that social stigma was the most common barrier to utilization of SRH services by adolescents (Biddlecom, et al. 2008). Although adults are supportive of adolescents accessing SRH information, they are less accepting of adolescents accessing RHS because of stigma (Barker, 2007).

Pregnant adolescents show decreased health seeking behavior because they experience increased community stigmatization and this suggests a bigger challenge to pregnant adolescents in terms of social support (Atuyambe, et al. 2009). Stigmatization of sexuality in the community further leads to adolescents feeling that they have to conceal the pregnancy from significant adults such as parents, teachers, and health care providers because of fear and feeling embarrassed (Hatters, Friedman, Heneghan & Resenthial, 2008 as cited in Agampodi, et al. 2008; Wood & Aggleton, 2008). Additionally, pregnant adolescents are less likely to seek antenatal care because they conceal the pregnancy and frequently seek an abortion (Mbonye, et al. 2005).

Depression during adolescent pregnancy is another common condition and is associated with social, behavioral, and health consequences. A study, which compared 184 depressed and 184 non depressed adolescents, revealed that teens with depression were significantly more likely to perceive barriers to care compared to non depressed teens (Meredith, et al. 2009). Perceived barriers such as worry, depression about what others think, or parent concerns about the pregnancy therefore contribute to poor health

seeking practices (Meredith, et al. 2009). Pregnant adolescents have lower self-esteem and those with depression have lower self-efficacy therefore they are less likely to seek care (Agampodi, et al. 2008; Barker, 2007). Interestingly, research in Australia found that adolescents who sought help had lower self-concept, which may reflect a temporary reduction in self-concept during a stressful moment. Another study found that adolescents who seek help have a lower self-concept (Bowles & Fallon, 1996).

Health Services Factors

Adolescents are reluctant to seek health services for their sexual and reproductive health needs during pregnancy. They are also reluctant to trust health workers because they perceive them as unfriendly and judgmental (Mbonye, 2003). Trust, rather than the need for help, is one of the key variables in determining whether a young person seeks help (Mbonye, 2003). It requires staff and providers of care to be sensitive to the needs of adolescents. Adolescents perceive a potential helper as a good listener who can be trusted rather than just simply offering advice (WHO, 2007). Sadly, many health service providers are hostile to adolescents who become pregnant out of wedlock. Pregnant adolescents have reported negative attitudes of health care providers (Matua, 2004). This is an area of concern in Midwifery practice, as it has serious complications for accessibility of maternal and neonatal care (Chaibva, Roos, & Elhers, 2007).

Women, including adolescents are sometimes reluctant to use maternity care because health care providers are perceived to be rude, insensible, and threatening to young mothers (Matua, 2004). They do not keep confidentiality. They share adolescents' secrets with their parents and other people (Atuyambe, et al. 2005). Pregnant adolescents are therefore reluctant to use existing health services or trust health persons or services

because of lack of trust and previous negative experiences in seeking help (Frydenberg, 1997, as cited in WHO, 2007). Consequently, they seek treatment for health needs from non-professional providers or family members who they personally know and trust (Atayambe, et al. 2005). A study that was done in Zambia by Newton, (2000) confirmed that adolescents preferred traditional healers and private health practitioners because previous experiences at public clinic settings were negative. They reported the experience of being scolded for being sexually active.

Services, if available, are situated far from the adolescent's homes, which is a hindrance to seeking care and thus causing a delay in seeking care. In some circumstances, even if the decision to seeking care is timely, there is often a delay in arriving on time at the health-care facility because transportation may be costly or unavailable and poor road conditions further worsen the situation (Barker, 2007).

A study in Guatemala and Indonesia found that the distance adolescents had to travel to obtain care determined compliance to a large degree, highlighting distance as a barrier to utilization of services (WHO, 2007).

Distance may not be the restriction to seeking care by pregnant adolescents. A study in West Africa and South Africa found that even if adolescents live in close proximity to a facility they are not always able to visit the facility (Ehlers & Maja, 2000; WHO, 2007). On the contrary, a study in an urban area of the United States of America (USA) measured the effect of the source of antenatal care on care-seeking behaviors among pregnant adolescents and found that adolescents who live in neighborhoods with An ANC were more likely to begin receiving care earlier in pregnancy (WHO, 2004).

Availability of health centres and awareness of their existence affects pregnant

adolescent's utilization of health-care services (Iyengar & Iyengar, 2000). In addition, limited access to available health facilities also affects the utilization of these facilities (Agampodi, et al. 2008). A large multi-centre research project in six francophone African countries found that ignorance of the availability of services and difficulty in access to them were the main obstacles in utilization of services by pregnant adolescents (Balde, et al. 2003). Health care facilities should be accessible to all pregnant adolescents irrespective of their social status, age, race, or level of education and should provide an environment of trust and confidentiality (Kluge, 2006).

Pregnant adolescents need more time for better contact with midwives, but survey data revealed that in actual practice rarely is provided (WHO, 2007). A survey of providers in Nepal concluded that underlying the poor access to reproductive health services by young females, even when they are married, was the reluctance of providers to communicate and interact with adolescent girls. They failed to discuss issues related to sexuality, and had a lack of skills in counseling young women in general (Mathur & Malhotra, 2001). Studies in Ghana, Dakar, Senegal, and Malawi identified hostile staff attitudes as one of the barriers in accessing public health services (MOH, 2008; Jaruceviene & Levasseur, 2006; Katz & Nare, 2002; Koster, Kemp, & Offei, 2001).

Pregnant adolescents are also concerned with the characteristics of the provider and the site or system (WHO, 2007). A study in USA reported that adolescents were more likely to obtain adequate care if they perceived benefits from the health services. The tens perceived benefits were, an attractive and inviting antenatal care site, and special efforts made to register and retain them in care (Barker, 2007). In addition, adolescents perceive benefits such as confidentiality, physical accessibility, treated with

respect, and to a lesser degree free services.

A study based on data from 10-19 year olds in Kenya and Zimbabwe reported that adolescents preferred youth only services, youth involvement in services, and young staff as the least important characteristics of services while confidentiality, short waiting time, low cost, and friendly staff as the most important characteristics (Erulkar, Onoka & Phiri, 2005). Similarly, in Uganda, a study which was done by Mbonye (2003) to identify the best approach for providing adolescents quality, affordable, accessible, and friendly services revealed that implementation of youth friendly services which adolescents trust improves access and use of services among adolescents leading to reduced morbidity from unwanted pregnancies.

The evidence presented shows factors that are associated with adolescent's health seeking practices during pregnancy in other countries. There was limited information from Malawian literature. Although, a situational analysis in Malawi's MOH (2008) revealed inadequate and inappropriate services for young people such as lack of integration of young people's health issues in most of the programmes, further research is needed to explore the factors that are associated with pregnant adolescent's health seeking practices.

Summary of Literature Review

The evidence presented describes the situation for adolescent's health seeking behaviors and reveals individual, psychological, and health service factors that are associated with pregnant adolescent's health seeking practices. However, much of the literature is on adolescent's utilization of other reproductive health services, prevention of unwanted pregnancy, and sexually transmitted infections including HIV and AIDS.

Most studies have not explored adolescent's health seeking practices and specific factors that are associated with their health seeking practices during pregnancy. Additionally, the results may vary widely among specific individual adolescents. Additional research that examines the barriers and preferences among pregnant adolescent's health seeking can help in directing program efforts to reach especially neglected subgroups of adolescents. Therefore, there is need to explore the factors that are associated with adolescent health seeking practices during pregnancy.

CHAPTER THREE

Methodology

1ntroduction

This chapter describes the methodological techniques that were employed to carry out the study. According to Burns and Grove (2005) research methodology is referred to the strategy of the study, from identification to final data collection. It focuses on the following; study type and design, study setting, sampling strategy, data collection and analysis, validity and reliability of the designed instruments, ethical considerations, and limitations of the study.

Research Design

A research design is an overall plan or picture of a study that spells out basic strategies and efficient methods that are used to obtain data about a specific phenomenon (Polit & Beck, 2006). A research design provides a plan for the overall structure that the researcher follows, namely the data collected and the data analysis plan. This study used a quantitative descriptive design. Descriptive designs help to discover the new meaning, describe what exists, determine the frequency with which something occurs, categorize the information, and establish associations between variables (LoBiondo-Wood & Haber, 2006; Hopkins, 2008). This research study used a quantitative descriptive design to determine the factors that are associated with adolescent's health-seeking practices during pregnancy.

Research Setting

A research setting is a physical location and conditions in which data collection takes place in a study (Polit & Beck, 2006). The study was conducted at N'deka, South

Lunzu, and Mpemba health centers in Blantyre rural. The health centres were chosen using Cluster sampling as areas of study. According to Polit and Beck (2006) cluster sampling is a form of sampling in which large groupings are selected first with successive sub sampling of smaller units. It is used when the study elements cover a wide geographical area and it is not possible to use random sampling. It involves moving through stages until the sample has been selected. A sample frame consisting of all the health centres in Blantyre rural with their corresponding population sizes was obtained from the Blantyre DHO. Secondly, a simple random sampling technique was applied to select the three health centres. However, statistics of adolescent pregnancy in Blantyre indicate that the chosen centers have the highest number of pregnant adolescents in Blantyre rural. Additionally, N'deka Health Center is at a rural growth centre therefore it caters for people from different backgrounds. The other two health centers also cater to clients from Blantyre semi urban, who are from different areas within the country, with different cultural backgrounds. The data therefore represented views from different backgrounds.

Study Population

According to Burns and Grove (2005) a population comprises all elements, for instance persons, objects, events, or substances that meet the inclusion criteria for the study. The population in this study comprised of pregnant adolescents and adolescents who have delivered within the previous 6 months, aged 13 to 19 years, attending the MCH clinics.

Inclusion Criteria

According to Polit and Beck (2006) inclusion criteria are characteristics that specify population characteristics. Inclusion criteria were adolescents who were pregnant

for the first time, at any gestation period, and those who delivered their first infant, within the previous 6 months, were selected for the study. The study also included both married and single adolescents, those who were communicating in Chichewa or English, came at an initial as well as subsequent visit, and were willing to participate in the study.

Exclusion Criteria

Polit and Hungler (1999) defines exclusion criteria as characteristics which a participant may possess that could adversely affect the accuracy of the results. It eliminates subject who are not representative of study population. Exclusion Criteria were pregnant adolescents who were very sick, those less than 13 years, adolescents delivered within the previous 6 months, those who were not able to speak Chichewa or English, adolescents with hearing and mental impairment, and those who were not willing to participate.

Sample Size

The sample size for the quantitative component of this study was 240. The sample was drawn from the three health facilities namely; M'deka, South Lunzu, and Mpemba which were chosen randomly. To determine the sample size, the researcher utilized information from the three health centres. According to literature review, there were 964 adolescents aged 13-19 years who had began child bearing in these health centres in the year 2008. Out of these adolescents, 264 utilized antenatal services. This means that the proportion of 27.4% utilized antenatal services.

First of all, the infinite population was calculated using the interval estimate of 95% confidence interval and a maximum allowable error of 5%. The equation for this infinite population is:

$$n = \frac{z^2\, p\,(1-p)}{e^2}$$ (Source: Lemeshow, Hosmer, Klar & Lwanga, 1990).

Where: z = confidence interval and the z value associated with levels of confidence. For 95% confidence, z is equal to 1.96

P= the proportion of pregnant adolescents within the age group of 13- 19 years and those who utilized antenatal services at M'deka, South Lunzu, and Mpemba health centers.

$$P = \frac{264}{964} \times 100 = 27.4\%$$

e = standard error maximum standard error and is equal to 5% (0.05)

n = sample size

Therefore $n = \frac{1.96^2 \times 0.274 \times 0.726}{0.05^2} = 306$

However, in order to determine sample size for this study, the finite population correction (fpc) factor was used with the following formula:

$$n = \frac{S}{1 + \frac{S}{\text{Population}}}$$ Source: (WHO, 2005).

Where: S is the calculated sample size from the infinite population. In this case it is 306.

Population = number of adolescents aged between 13 and 19 years, who have began child bearing in these health centers in the year 2008 which is equal to 964.

However, it is assumed that the number of adolescents who have began child bearing may increase by 15% in 2010 so the population will be 964 x 0.15= 144.6

Therefore the population was 964+ 144.6 =1108.6, this is equal to 1109.

$$n = \frac{306}{1 + \frac{306}{1109}} = 239.8307077 = 240$$ Therefore, the sample size was 240.

Sampling

A non-probability Purposive sampling technique was used to select the sample units. A sample of 80 was selected from each health centre until a total sample size of 240 had been interviewed. A sample was selected from the accessible population of pregnant adolescents and adolescent mothers who had delivered their first infant within the previous 6 months in the three health centres. However, the initial proposal was to use probability systematic sampling. This proposal had to be modified to purposive sampling method because the client flow was very low. The researcher had to use her judgment and knowledge to select the participants that met the inclusion criterion during the data collection period. Although the purposive sampling method has been criticized for its failure to control and minimize bias (Burns & Grove, 2005). It was appropriate in this study in which random sampling methods were not feasible because adolescents visited the ANC at different times and they wanted to go home as soon as possible. Therefore, in order to obtain an adequate sample, all pregnant adolescents and adolescents' mothers delivered within the previous 6 months visiting the antenatal and postnatal clinic under the age of 19 at the selected sites were interviewed. The procedure was repeated daily between 8.30 am to 12.30 pm.

Pilot Study

The pilot study was conducted at Ndirande Health Centre, one of the health centres in Blantyre district, for 2 days. It was done to check consistency of the

questionnaire and to estimate the data collection period for the main survey. It also helped to determine whether the format was appropriate including sequencing and wording of questions. Ten pregnant adolescents and adolescent mothers between the ages of thirteen and nineteen were interviewed. The pretest was reviewed, the questionnaire was refined and the final instrument was produced in readiness for the main survey.

Validity

According to Polit and Hungler (1999) validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. To establish internal validity, the research instrument was evaluated by giving the questionnaire to a panel of experts in Research and Adolescent Health and the supervisor. They conducted measurements and made decisions concerning what was and was not measured and established whether the instrument was sufficiently comprehensive in seeking the proper range of responses.

Reliability

Reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Polit & Hungler, 1999). The major attributes of reliability are stability, equivalence, internal consistency and interlater consistency (Polit and Hungler, 1999). Reliability of the tool was ensured by accurate and careful phrasing of each question to avoid ambiguity, and leading respondents to a particular answer. Respondents were informed of the purpose of the interview and the need to respond truthfully. In addition, a pilot study established stability and consistency.

Ethical Consideration

Permission to access approval to conduct the study was sought from Kamuzu

college of Nursing Research and Publications committee (KCN RPC) and the College of Medicine Research and Ethics committee (COMREC). In addition, permission to conduct the study was obtained from the Blantyre District Health Officer (DHO), those in charge of the health centres of the study sites, and the participants. (See appendix 4 and 5). The study was conducted with uttermost fairness and justice by eliminating all potential risks. Ethical issues such as right to privacy, justice, beneficence, respect for persons, and confidentiality were guarded. The decision to participate was made without coercion to maintain the principle of respect for persons. Participants were allowed to participate independently by giving their informed consent to participate in the study or to freely choose to participate. To ensure that the participants were given an informed consent to participate in the study, the purpose of the study was fully explained to them. Criterion to participate was also explained to them. Risks and benefits were highlighted. The participants were informed that participation was voluntary and they were free to withdraw from any time. They were assured that withdrawing or refusal to participate in the study would not affect their entitlement to health services. Explanations were conducted in the language that the participants were conversant to ensure understanding of the issues involved. Prior to signing the consent, the participants were allowed to ask questions to ensure that they have fully understood the explanation.

At the end of the explanation, they were asked to sign a written consent form before participating in the study. (See appendix 2 for the consent form.) Anonymity was achieved by not putting names on the questionnaires; instead, code numbers were used. Names and unique identifiers were not used in the final analysis of the research. To ensure confidentiality, no individual was identified from the research analysis and

interpretation. In addition, at the end, the researcher did not link the information to any subject. The interview was being conducted in a private closed office to maintain audiovisual privacy. The information was locked away from the authorities and at the end, the records were destroyed to respect the subjects privacy.

Psychological harm was a risk secondary to periods of long waiting. This is another basic right to be considered when conducting a research on human beings. In this study, the subject encountered possible psychological harm. This was prevented by interviewing the respondents within the agreed time. Additionally, privacy, confidentiality, and anonymity were ensured during the interview. The subjects were treated fairly by giving them their informed consent prior to participation and the option to withdraw from the study as they wished without any negative consequences to maintain justice. After full explanation of the study, respondents were asked to give both verbal and written consent to show their willingness to participate in the study. (See appendix 1 and 2 for the participant information sheet and a consent form).

Data Collection

A structured questionnaire was used to obtain data. A structured questionnaire uses formal and written questions which are asked orally in face to face interviews (Polit & Beck, 2006). The structured questionnaire is widely used in descriptive quantitative studies (Burns & Groove, 2005). Although structured questionnaire is time consuming and might be subject to bias (Burns and Groove, 2005), it was used in this study. The data was collected from 1st March, 2010 to 23rd April, 2010. The questionnaire was based on the study objectives. It was divided into four different sections. Each section covered questions related to the objectives. Section A, collected demographic details of the

subjects. Section B, collected information individual factors that influence adolescent's health seeking practices during pregnancy. The third section comprised of eleven questions on psychological factors .The last section offered nine questions pertaining to health service factors that influence adolescent's health seeking practices during pregnancy. The data collection procedure for this study was one to one interviews using a structured questionnaire. Closed ended and open-ended questions were asked. Respondents were asked to answer verbally and elaborate. The comments were recorded verbatim, grouped, and analyzed quantitatively. The questionnaire was translated into Chichewa and back translated to ensure consistency of meaning. See appendix 3 for the Interview guide.

Data Cleaning

The interviews were conducted by the researcher. The researcher checked every structured questionnaire schedule for completeness at the site immediately after the interview, so that any missing information could still be collected from the adolescent's concerned. The filled questionnaires were numbered and checked for completeness, consistency, and validity before data entry.

Data Management and Analysis

The data was analyzed using SPSS version 16.0 with the help of the statistician. Descriptive statistics was used to analyze the data. Descriptive statistics such as frequencies and percentage were used to describe and summarize the data. Values for categorical variables were expressed as absolute numbers or proportions.

CHAPTER FOUR

RESULTS

Introduction

This chapter reviews the data collected consistent with the study objectives to identify individual, psychological, and health service factors that are associated with adolescent's health seeking practices. The sample included 240 pregnant adolescents and adolescents who have delivered within the previous 6 months from Mpemba, South Lunzu, and N'deka Health Centers in Blantyre rural. The response rate was 100% (n=240). The results of the analysis of the data are presented below in a form of tables, graphs, and summary statistics.

Individual Factors

Demographic Characteristics of the Respondents

To obtain an understanding of the demographic characteristics of the study population, the following data was solicited: age, tribe, religious affiliation, and marital status, level of education, occupation, and decision making power.

The age of the respondents ranged from 13 to 19 years. More than half of the adolescents 58.8% (n=141) were between 18 and 19 years. 40.8% (n=98) were between the ages of 15 and 17 years. With respect to marital status of the respondents, two-thirds of the respondents 68% (n=164) were married and a third 30.4 % (n=73) were single. The level of education of the respondents was low. It ranged from no education to tertially education. The majority of the respondents 95.8% (n=230) had been to school. Among those who had been to school, over two-thirds 72.5% (n=174) attended primary school and less than a quarter 17.3% (n=40) completed primary school education.

However, only 23.1% (n= 56) of the respondents attended secondary school education. Most of the respondents were not employed. Almost two-thirds of the respondents 63.8% (n=153) were house wives and 27.5% (n=66) had no occupation. Table 1 summarizes demographic characteristics of the respondents.

Table 1

Demographic Characteristics of Respondent: n=240

Variable name		Frequency	Percentage (%)
Age	18-19 years	141	58.8
	15-17 years	98	40.8
	Less than 14	1	0.4
Tribe	Yao	73	30.4
	Lomwe	60	25.0
	Ngoni	40	16.7
	Chewa	22	9.2
	Sena	22	9.2
	Tumbuka	3	1.3
	Other	20	8.3
Religion	Christians	224	93.3
	Moslems	16	6.7
Marital status	Married	164	68.3
	Separated	3	1.3
	Single	73	30.5
Level of education	Primary school Completed	174	72.5
	Primary School	40	17.3
	Secondary School	56	23.4
	Tertially education	1	0.4
	No formal school	9	3.7
Occupation	House wife	153	63.8
	None	66	27.5
	Business women	10	4.2
	other	10	4.2
	Student	1	0.4

Decision Making in Health Seeking Practices

In order to find out whether decision making was a determinant to adolescent's health seeking practices during pregnancy, the respondents were asked if they can independently make decisions concerning their health. More than two-thirds of the respondents 73.8% (n=183) reported that they cannot make independent decisions. Just over half of the respondents 51.3% (n=123) identified their mother as a person who can make decisions. See table 2.

Table 2

Decision Maker Concerning Health

Decision maker	Frequency (240)	Percentage (%)
Mother	123	51.3
Self	57	23.8
Husband	26	10.8
Other	24	10.0
Close friend	10	4.2
Total	240	100.0

Knowledge About Health Seeking Practices

To determine the level of knowledge on health seeking practices during pregnancy, the participants were asked to respond to questions addressing the following areas; knowledge on the sources of care and information, importance of seeking care from the Antenatal Clinic (ANC), when to start antenatal care, and possible consequences of adolescent pregnancy.

knowledge on sources of care and information during pregnancy.

Almost all the respondents 96.3% (n=231) reported that care can be obtained from a variety of sources. Among 96.3% (n=231) who knew that care can be obtained from a variety of sources, 92.1% (n=221) reported that care can be obtained from the hospital. See table 3. Significantly, fewer respondents identified sources of information about pregnancy. More than a quarter of the respondents 27.7% (n=69) reported that information can be obtained from the counselors in the community and 19.2% (n=46) from other sources such as parents, police and school. See table 3

Table 3

Knowledge on Sources of Care and Information: n=240

Sources of care	Frequency	Percentage (%)
Hospital	221 (n=240)	92.1
TBA	63 (n=240)	23.8
Elders in the community	26 (n=240)	10.8
Sources of information		
Counselors	69 (n=240)	28.3
Others	46 (n=240)	19.2
Youth programmes	35 (n=240)	14.6
peers	9 (n=240)	3.8
Church counselors	5 (n=240)	2.1

Although respondents identified a number of sources of care, almost all the respondents 93.8%, (n=25) identified the hospital as a preferred source of care. See table 4

Table 4

Knowledge on Preferred Sources of Care: n=240

Preferred Sources of care	Frequency	Percentage (%)
Hospital	225 (n=240)	93.8
TBA	0 (n=240)	0
Elders in the community	0 (n=240)	0
Preferred Sources of information		
Counselors	0 (n=240)	0
Church counselors	0 (n=240)	0
Youth programmes	0 (n=240)	0
Peers	0 (n=240)	0
Others	4 (n=240)	1.7

knowledge on the importance of seeking care at the Antenatal Clinic (ANC).

On the importance of seeking care at the ANC, almost all respondents 99.6%, (n=235) knew the importance of obtaining care from the ANC. More than a third of the respondents 38.3% (n=92) could not identify when to start antenatal care. However, 35.8% (n=86) knew that they should start antenatal care between the first and fourth month while 25.8% (n=62) said that they should start antenatal care between the fourth and sixth month of gestation.

Although more than a third of the respondents 35.8 % (n=86) reported that pregnant women should begin ANC between the first and fourth month, only one tenth 10.4% (n=25) of the respondents began ANC before four months gestation. Nearly half of the respondents, 44.16 % (n= 106) did not begin antenatal care until between the Seventh and ninth month of gestation; 43.3% (n= 104) respondents started ANC between the fourth and seventh month of gestation. See table 5

Table 5

Knowledge On Antenatal Attendance Versus initial ANC Visit

	Knowledge (Frequency)	Percentage (%)	Actual Initial ANC Visit, (Frequency)	Percentage %
Between first and less than four months	86	35.8	25	10.4
Between fourth and less than six months	62	25.8	104	43.3
From seven months	0	0	106	44.1
Don't know	92	38.3	5	2.2
Total	240	100.0	240	100.0

knowledge about the consequences of adolescent pregnancy.

In order to determine adolescent's knowledge of consequences associated with adolescent's pregnancy, respondents were asked if they were aware of the physical consequences of teenage pregnancy. Participants were asked to identify all known negative consequences. Over two-thirds of the respondents 62.3 % (n=149), were aware of some possible consequences and only a third 37.7% (n=90), were unable to identify any negative consequences. Participants identified various sources of knowledge about consequences of adolescent pregnancy. They reported hearing about the consequences from the midwives at the antenatal clinic 85% (n=204), and other sources such as mother 12.1% (n=29), close friends 10.0% (n=24), and school 17.1% (n=17).

To determine their level of knowledge regarding consequences associated with adolescent pregnancy, participants were asked to identify all known physical, Psychological, and social consequences. They were also asked to identify possible ways

of preventing or decreasing these consequences. On physical consequences, just over half of the respondents 56.3%, (n=135) reported that obstructed and prolonged labour was a physical consequence associated with adolescent pregnancy. The psychological consequences of adolescent pregnancy reported by the respondents were depression 47%, (n=112), stigma 23.0% (n=55), and low self esteem 17.9% (n=43). Social consequences associated with adolescent pregnancy that were identified by the respondents were; increased poverty 49.6% (n=119) and drop out of school 16.3% (n=39). See table 6

Table 6

Consequences of Adolescent Pregnancy *n=240*

	Frequency	Percentage (%)
Physical Consequences	(n=240)	
Obstructed Labour	135	56.3
Anemia	28	11.7
Other	77	24.6
Psychological consequences	(n=240)	
Depression	112	46.7
Stigma	55	23.0
Low self esteem	43	17.9
Other	15	6.2
Social Consequences	(n=240)	
Drop out of school	39	16.3
Increased poverty	119	49.6
Don't know	53	22.1
Other	29	12.1

More than a third 42.5% (n=102) were unable to identify any measures that prevent possible consequences associated with adolescent pregnancy. A few respondents 15.8% (n=38) reported that consequences of adolescent pregnancy can be prevented by seeking care from a skilled attendant. See table 7.

Table 7

Prevention of Adolescent Pregnancy Consequences

Preventive measure	Frequency(240)	Percentage (%)
Don't know	102	42.5
Care from skilled attendant	38	15.8
Early antenatal care	31	12.9
Other	69	28.8
Total	240	100.0

In summary, the participants had knowledge on sources of care, importance of obtaining the care at the hospital, and some physical, psychological, and social consequences associated with adolescent pregnancy. However, the respondents had inadequate knowledge about the risks associated with teen pregnancy and they were lacking knowledge on when to start antenatal care and preventive ways to the consequences . Furthermore, respondents reported hearing about the possible consequences of adolescent pregnancy at the antenatal clinic yet the majority did not begin antenatal care until 7 months gestation or later.

Psychological Factors

In an attempt to explore adolescent's perceptions on health seeking practices during pregnancy, respondents were asked to identify psychological factors that are associated with adolescent's health seeking practices during pregnancy. The majority 89.2%, (n=214) were able to identify some of the psychological factors. The respondents were asked to identify as many factors as possible. A majority of the respondents

identified reluctance 95.4% (n=229), feelings towards seeking advice 86.2% (n=207), fear 84.2% (n= 202), and shyness (85.8% n=206) as major psychological factors that hinder seeking health care during pregnancy. However, none of the participants mentioned low self esteem and depression as psychological factors that hinder pregnant adolescent's health seeking practices. See table 8.

Table 8

Psychological Factors that Hinder Health Seeking Practices (n=240).

Factor	Number of participants who identified	Percentage(%)
Reluctance to seek care	229 (n=240)	95.4
Feelings towards seeking advice	207 (n=240)	86.2
Shyness	206 (n=240)	85.8
Fear	202 (n=240)	84.2
reluctance to open up	122(n=240)	50.8
Denial and concealed pregnancy	119 (n=240)	49.6
Stigma	82 (n=240)	34.2
Other	28 (n=240)	11.7
Low self esteem	0 (n=240)	0
Depression	0 (n=240)	0

Reluctance to seek care

The results revealed that among the respondents, 95.4% (n= 229) identified reluctance to seek care as a barrier to health seeking practices. (Table 11) The majority 89.6% (n=125) indicated that they were reluctant to seek care during pregnancy because they were embarrassed and had fear (n=192) 80.00%. See figure: 2

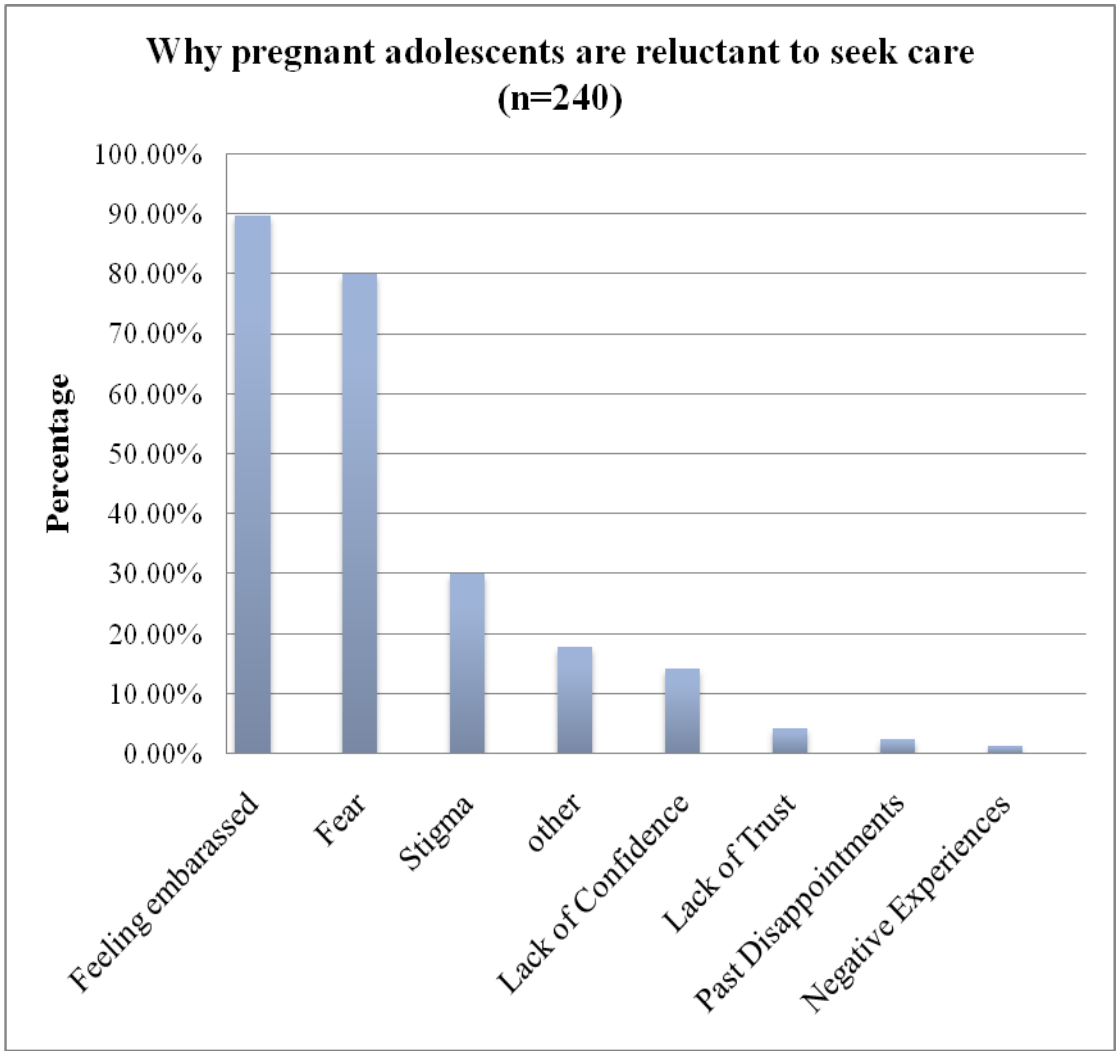


Figure 2. Reasons for not seeking care.

Feelings Towards Seeking Advice

Participants were asked to express how they feel about seeking advice to seek care when needed and disclosing to relatives about the pregnancy. The majority of the respondents 86.2% (n=207) felt that it was necessary to seek advice from others when care was needed during pregnancy and only 12.5% (n=30) felt that it was not necessary. See table 9

Table 9

Adolescent's Feelings Towards Seeking Advise when Care is Needed

Feelings towards seeking advise	Frequency (n=240	Percentage (%)
Necessary	207	86.2
Not necessary	30	12.5
Don't know	3	1.25

Half of the respondents mentioned mothers 51.2% (n =106), close friends 4.2% (n=8) husbands 11.7% (n=24), mothers in law 25% (n=52), and others 8.8% (n=17) as sources of advice. Furthermore, about three quarters 77.1 %, (n=185) of the respondents reported that they sought advice from others when care was needed in order to be told what to do. See table 10.

Table 10

Reasons for Seeking Advice

Reason for seeking advice	Frequency (n=240)	Percentage (%)
For them to tell us what to do	185	77.1
For advice	21	8.7
Don't know what to do	21	8.7
Other	13	5.4

Reluctance To Open up

Half of the participants 50.8 %, (n=122) denied telling their parents or other relatives that they were pregnant. Among the 50.8 % (n=122) respondents who did not disclose that they

were pregnant, two-thirds of the respondents 66.4% (n=81) stated that they failed to disclose about the pregnancy because they were afraid, 18.2% (n=22) did not know that they were pregnant, and 11.48% (n=14) were embarrassed. See table 11

Table 11

Reasons for Not Disclosing about Pregnancy.

Reasons for not disclosing about the pregnancy	Frequency (n=122)	Percentage (%)
Fear	81	66.4
Did not know that they were pregnant	22	18.0
Embarrassment	14	11.5
Wanted to abort	5	4.2
Total	122	100.0

Stigma

The results showed that more than a third 34.2% (n=82) reported having been stigmatized. The majority of the respondents were stigmatized by parents 20% (n=48) and friends 11.7% (n=28). Of those stigmatized 38.75% (n=93), 55.9% (n=52) reported that they experienced several problems. They were chased away from home 54.7% (n=52), laughed at 34.4% (n=32), and not talked to by the parents, their friends, and the community 8.6% (n=8). See table 12.

Table 12

Problems Experienced by Pregnant Adolescents.

Problems experienced	Frequency (n=95)	Percentage (%)
Chased away from home	52	54.7
Laughed at	32	33.6
Not talked to	8	8.5
Denied responsibility	3	3.2
Total	95	100.0

Health Service Factors

Hindering Factors

Respondents were asked to identify health service factors that hinder pregnant adolescent's health seeking practices. The results showed that more than half of the respondents 81.2% (n=195) were able to identify the factors and 12.1% (n=29) could not identify any factor. The respondents were asked to identify as many factors as possible. The majority of the respondents 80.4% (n=193) reported that transport was one of the health services factors that was hindering there health seeking practices. Other factors were, distance 79.2% (n=190), and lack of availability of youth friendly services. See figure 3

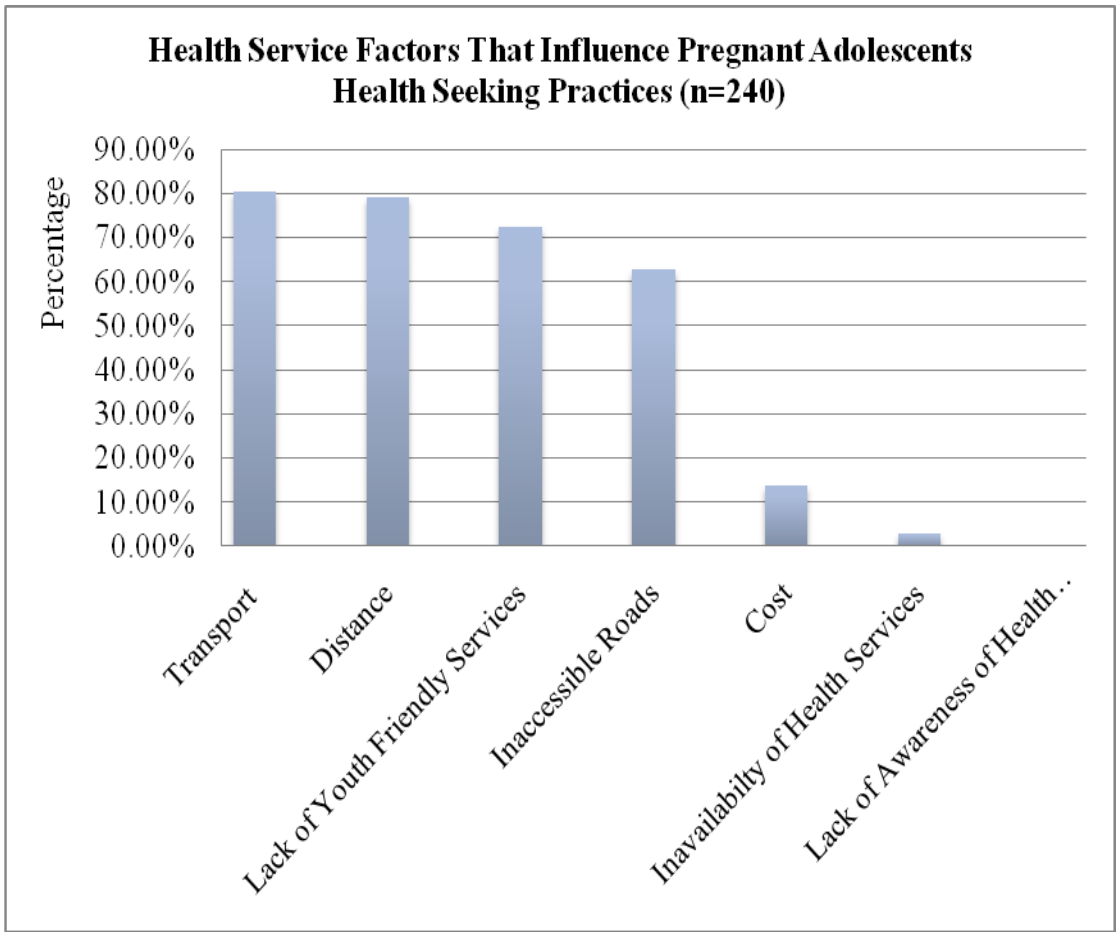


Figure 3. Health service factors that hinder adolescent health seeking during pregnancy.

Distance From Home To The Health Care Facility

Since distance was identified as one of the hindrances to pregnant adolescent health seeking practices, the respondents were asked to rate the distance from their home to the health facility in terms of very far, not very far, far, and near. Two-thirds of the respondents 63.3% (n=152) reported that the distance from home to the health facility was very far. Only 7.1 % (n=17) reported that it was near. See figure 4.

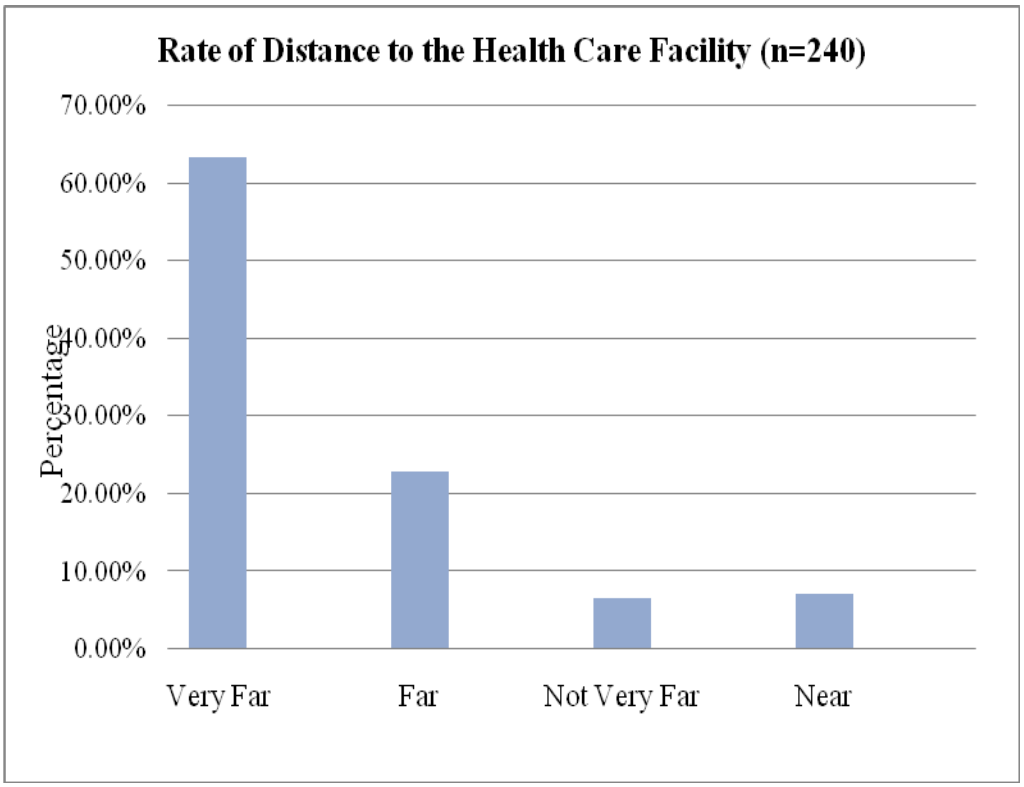


Figure 4. Distance to the health facility.

Lack Of Provision of Adolescent Friendly Services

In order to determine whether lack of provision of youth friendly services was a hindering factor in obtaining health seeking practices, respondents were asked if adolescent friendly services were provided. The majority of the respondents 72.5% (n=174) reported lack of availability of youth friendly services. Respondents identified negative attitudes of staff 13.3% (n=32), stigma 13.3% (n=32), and more than half of the respondents 73.3% (n=176) identified others reasons indicating a lack of youth friendly services. Other reasons identified were that adult women and adolescents attending the same clinic at the same time (n=58), inconvenient clinic hours for adolescents (n=60), and lack of special information for adolescents (n=51). See Table 13

Table 13

Perceived Reasons for not Providing Youth Friendly Services.

Reason	Frequency (n=240)	Percentage (%)
Negative Attitudes of Staff	32	13.3
Stigma	32	13.3
Other	176	73.3
Total	240	100.0

Promoting Factors

Two-thirds of the respondents 66.7%, (n=184) identified health service factors that promote adolescent's health seeking practices. Less than half of the respondents 44.6%, (n=107) reported that provider's sensitivity to adolescent issues would promote attendance. Additionally, 19.2% (n=46) of the respondents identified the provision of free services and 0.8%, (n=2) respondents identified provision of skilled care as factors that promote utilization. See table 14

Table 14

Health Service Factors Promoting Utilization of Youth Friendly Services.

Factors	Frequency (n=240)	Percentage (%)
Providers sensitivity to adolescents issues	107	44.6
Free services	46	19.2
Skilled care	2	0.8
Other	29	12.1
Don't know	56	23.3
Total	240	100.0

Summary

In this chapter the results have been presented consistent with the study objectives using tables and figures. The study identified a number of individual, psychological and health service factors that hinder and or promote adolescent's health-seeking practices during pregnancy. The individual factors were age, marital status, level of education, attitudes, inability to make decisions as regards to care, and knowledge related to health seeking practices. Identified psychological factors were stigma, denial, fear, shyness, reluctance to seek care and to open up, denial and concealed pregnancy, and stigma. The health service factors that were found to hinder adolescent's health seeking practices during pregnancy were transport, distance, inaccessible roads, unavailability and lack of awareness of health facilities, cost, a lack of provision of adolescent friendly services, and negative attitudes of staff. The health service factors found to promote health seeking practices were provider's sensitivity on adolescent's issues, free services, skilled care, good advice, good treatment and care, trust, privacy, and confidentiality. The next chapter presents a discussion, limitations of the study, recommendations, and conclusion.

CHAPTER FIVE

Discussion

Introduction

This study contributes to the understanding of the factors that are associated with adolescent's health seeking practices during pregnancy in rural Malawi. This section discusses how individual, psychological, and health service factors are associated with adolescent's health seeking practices during pregnancy. The discussion of the results will be consistent with the study objectives which are the components of Kroeger model (1983) (figure 1) which guides in the understanding of health seeking behavior.

The Kroeger Model (1983)

The Kroeger model has three components namely; individual factors, psychological factors, and health service factors. The results in this study have shown that the interaction of adolescent pregnancy with some of the factors in the components of the model guide health seeking practices. The study findings related to pregnant adolescent's health seeking practices will be discussed consistent with these components.

Individual Factors

The individual factors identified in the study were age, marital status, level of education, decision making power, and knowledge related to health seeking practices.

Age

Maternal age appeared to have the greatest influence on adolescent health seeking practices during pregnancy. The study findings showed that more than half of the respondents were aged between 18 and 19 and more than a third were less than 17 years. This could be because the birth rate among 18-19 year olds is much higher than among

younger adolescents aged 15-17 years (Singh, 2000 cited in WHO, 2007). However, in this study, it may also suggest that adolescents under 17 years of age are less likely to access services during pregnancy than their older cohorts. A study by Reynolds, et al. (2006) reported that women younger than 18 years are significantly less likely to seek early care during pregnancy. Similar findings have been reported in South Africa. Ehlers and Maja (2001) found that adolescents within the ages of 16 and 17 showed poor attendance of antenatal clinics despite clinics being within walking distance. This shows that young adolescents are less likely to seek formal health services early even when the services are available. This could be because of lack of youth friendly services. They may continue with their schooling and experience problems in attending antenatal clinic even after school due to inconvenient location or hours of operation. Additionally, they might be too young and ignorant to appreciate the value of seeking care during pregnancy.

Marital Status

Marital status is regarded as an important factor that is associated with pregnant adolescent's health seeking practices in this study. In Malawi, nearly 11% of women aged 15-49 years were in marriage before 15 years of age and 51.8% of those aged 20-49 years reported married before 18 years of age with higher proportions in rural and higher illiteracy groups (NSO, UNICEF, 2006). However, exact statistics regarding association of marital status of pregnant adolescent's with health seeking practices in Malawi is not known. The findings of this study revealed that one-third of the respondents were single. This suggests that unmarried pregnant adolescents are less likely to seek antenatal care early. This has also been reported in Latin America, Sub Saharan Africa, and Asia by Treffers, Olukoya, Ferguson, and Lifestrand (2001) and Reynolds, et al. (2006).

In Uganda, a study on utilization of antenatal services by Assimwe (2007) reported that an increased number of antenatal visits was associated with marital status with married girls 1.5 times more likely to go for antenatal care compared to unmarried adolescents. Pregnancy out of wedlock is regarded as a disgrace to the adolescents as well as to their parents. The solution is to get married if the man responsible accepts the pregnancy. Therefore, unmarried pregnant adolescents would not attend antenatal clinic until the parents know whether she is getting married or not as reported by Phafoli, et al. (2009). However, in this study, more than half of the respondents were married. A study by Chaibva, Roos, and Elhers (2007) in Bulawayo, Zimbabwe had similar results. This suggests that married pregnant adolescents may initiate antenatal care because they receive financial and social support from their spouses and parents.

Many hospitals offer antenatal services regardless of the age of a pregnant woman. The results of this study have shown that youth friendly services were not provided. Adult women and adolescents were attending the same clinic at the same time. It is therefore a problem for pregnant adolescents to find themselves in the company of age mates or friends to their mothers who are probably married when they are out of wedlock. This suggests a need to investigate the association of marital status with pregnant adolescent's health seeking practices in Malawi.

Education

The level of education is associated with pregnant adolescent's health seeking practices. The results suggest that the level of education of the respondents was low. More than half of the respondents attended primary school education. Low level of education can negatively affect the adolescent's comprehension of important information

and their ability to make informed decisions (Matua, (2004). This implies that pregnant adolescents who may have attained low level of education may not value utilization of ANC.

The results showed that the dropout rate was very high. Less than half of the respondents completed primary education. Although 58% of the respondents attended primary school education, less than a quarter 17% completed primary education. This supports the findings by NSO, UNICEF (2006) that although the primary school attendance rate of girls in Malawi is very high (82%), only 35% of the pupils complete primary school education and 54% of the pupils'dropout in standard 5. The high dropout rates are mostly due to pregnancy and early marriages (World Bank, 2010). This denotes that there is an association between early child bearing and lower education attainment. Similar findings have been reported by Phafoli, et al. (2007) in Lesotho and NSO (2010) in Malawi.

Adolescents with low education levels are less likely to seek health care services early in pregnancy. In this study, the majority did not begin antenatal care until between the forth and ninth month of gestation. The association between low level of education and women receiving little or no antenatal care has also been reported by WHO (2004). This finding implies that low education levels have implications for the adolescent's uptake of health services. There is a delay in recognizing the need to seek care as reported by Atuyambe, et al. (2008).

Decision Making

In many parts of the world, particularly in developing countries, the decision-making capacity surrounding women's ability to seek care is limited and their health and care during

pregnancy rank low in family priorities (Family Care International, 1998).

In this study, decision making was identified as a barrier to health seeking practices. More than two-thirds of the respondents reported that they could not make independent decisions. This shows that decision making power was limited. The results support findings by Dlamini and Van der Merwe (2002) that women, and in particular adolescent girls, have an inferior status in the society that accords them a subordinate role in the decision making process. In Uganda, Atuyambe, et al. (2008) observed that where a woman's decision-making is restricted, decisions regarding health care for pregnancy and pregnancy-related complications may be delayed, often with significant health consequences. Although personal autonomy is a key determinant of a woman's ability to seek reproductive health services, respondents identified their mothers, husbands, and close friends as people who can make decisions on their behalf. In most cultures in the developing world, a pregnant adolescent has less autonomy and is totally dependent on her partner, mother-in-law or parents for approval and access to services. Furthermore, adolescent decision making power is extremely limited particularly in matters of reproduction and sexuality (Family Care International, 1998).

A study in Zaria, Nigeria, found that in almost all cases, husband permission was required for a woman to seek health services, including life saving care. If a husband was away from home during a delivery, others were often unwilling to take the woman for care no matter how pressing the need appears to be (Thaddeus and Maine, 1994). In a study at Chilomoni Health Centre in Blantyre, Lule, Tugumisirize, and Ndekha (2000) observed that relatives refused women to go to a health centre for antenatal care or when in labour. This shows that adolescents who have a say in family decisions are more likely to make

independent health related decisions and receive care than those who are not. Where the social economic status of women, particularly of pregnant adolescents in the society is low, the decision making process is affected.

The results of the study showed that most of the respondents were not employed. Almost two-thirds of the respondents were house wives followed by a quarter of the respondents who had no occupation. This signifies low social economic status and their decision making process may have been limited. Low economic status is also a major constraint to from the hospital and/or antenatal clinic in this study, few respondents knew that antenatal care can be initiated between the first and fourth month of pregnancy. This was compared with respondent's behavior with respect to commencement of antenatal care. Surprisingly, only 10.41% started antenatal care between first and the fourth month and more than one third 44.16% did not start antenatal care until seven months. This denotes that , knowledge on attendance of ANC does not influence actual initial antenatal attendance. These findings are similar to those of Elhers and Maja (2001). In a study on adolescent mother's perceptions of reproductive health services in Garankuwa area of South Africa, the results showed that pregnant adolescents may not attend ante-natal clinic early despite knowing importance of attending these clinics. This implies that knowledge alone did not translate into pregnant adolescents starting antenatal care early. Adolescents can correctly identify ways of preventing pregnancy and the importance of utilizing reproductive health services yet they delay or do not utilize them. Although it is recommended by WHO that antenatal care start in the first trimester or early in the second trimester to allow early screening and management of complications, care is often delayed or attended infrequently. The results in this study have shown that more than a

third 44.16% of the respondents did not start antenatal care until seven months gestation. A study done in Malawi by (Brabin, et al. 1998 cited in WHO,2007) showed that about 33% of nulliparous girls attended antenatal clinic at 20-22 weeks while 30% at 24-27 weeks gestation. According to FANC schedule, Antenatal care should be initiated before 16 weeks of gestation or as soon as the pregnancy is confirmed (MOH, 2008). This supports what most researchers have noted; mainly that delay in deciding to seek care is predominant among pregnant adolescents (Okonofua, 1992; Phafoli, et al. 2007; WHO, 2004 & WHO, 2007).

Adolescent's knowledge regarding consequences of teenage pregnancy appears to be linked to health seeking practices. The results revealed that two-thirds of the respondents were aware of some of the possible consequences of adolescent pregnancy. This may promote health seeking practices because they are able to recognize and interpret consequences of adolescent pregnancy. Additionally, it may decrease morbidity related to adolescent's pregnancy by reducing their delay in seeking care. However, a third of the respondents could not identify any of the consequences.

Lack of knowledge by adolescents regarding pregnancy risks is correlated with poor health seeking practices. This was also observed by WHO (2009) and Swan (2003). This therefore calls for a need to educate the community, particularly adolescents, about consequences of adolescent pregnancy in order to promote health seeking practices during pregnancy. The majority of the respondents learnt about the possible consequences from the midwives at the antenatal clinic. This supports the findings by Wittenberg, et al. (2007) that the hospital plays a major role in providing information regarding possible consequences of adolescent pregnancy. Others learnt from their

mothers, close friends, the radio, and schools. Mothers, close friends, radios and schools were also mentioned by Wittenberg, et al. (2007) as sources of information about sexual related matters including adolescent pregnancy. Surprisingly, in this study, the majority did not mention mothers as a source of information. This poses a question as to why they were not taking a leading role yet they are regarded as decision makers. Additionally, the results of this study revealed that more than a third did not start antenatal care until seven months. This implies that most pregnant adolescents get the message about the consequences of pregnancy very late in their pregnancy.

Adolescent knowledge level concerning prevention of possible consequences of adolescent pregnancy is poor. In this study, more than a third of the respondents did not know the measures to take in order to prevent possible consequences secondary to adolescent pregnancy. Although complete and accurate information empowers adolescents to make choices that promote their lives, many young people in Malawi lack information that would enable them to prevent negative sexual and reproductive health outcomes as reported by Wittenberg, et al (2007). This is consistent with the findings by Agampodi, et al. (2008) that most pregnant adolescents lack information regarding the dangers of poor health seeking practices, how they affect pregnant adolescents, and how to prevent them. A cross section study in Malawi, Bukina Faso, Ghana, and Uganda by Bankole, Biddlecom, Guiella, Singh, and Zulu (2007) revealed that adolescents have lower levels of detailed knowledge about pregnancy prevention. Inadequate knowledge has also been identified by a third of the respondents as a factor that hinders health seeking practices. Therefore lack of knowledge on measures to take in order to prevent consequences secondary to adolescent pregnancy could have contributed to poor health

seeking behavior. Provision of detailed and practical information about the consequences of pregnancy and how to prevent them is very important.

Psychological Factors

The identified psychological factors were feelings towards seeking advice, reluctance to seek care and to open up, embarrassment, fear, stigma, lack of confidence, and denial.

Seeking Advice

With respect to attitudes towards health seeking practices, almost all the respondents felt that it was necessary to seek advice from others when care was needed. Respondents mentioned mothers, close friends, husbands, and mothers in law as sources of advice. Wittenberg, et al. (2007) reported similar findings in Malawi. This shows that adolescents value the opinions and advice of peers, family members and the community on health seeking practices over that of health care providers. If peers families and even the community believe that informal health care services are more appropriate for them, they seek care from these services (Agampodi, et al. 2008).

Reluctance to Open up

The reluctance among adolescents to open up and discuss their pregnancy concerns with parents when faced with an SRH condition that requires medical attention seems to be a challenge. It also affects health-seeking practices. Slightly over half of the participants in this study declined telling their relatives or parents that they were pregnant. This is consistent with results by Kibmobo, et al. (2008) in Uganda that most pregnant adolescents were hesitant to disclose their actual condition. Traditionally in Malawi, young girls are not expected to be engaged in sex or get pregnant before

marriage therefore pressure to conform to this standard may cause adolescents to fear disclosing that they are pregnant and hereby hinders their health seeking practices. Furthermore, fear, inadequate knowledge on signs of pregnancy, embarrassment, and desire to abort the pregnancy may cause adolescents not to disclose their pregnancy (Table 9). This is similar to the findings by Biddlecom, et al. (2008) who reported that pregnancy drives adolescents to hide their condition and further limit their utilization of treatment and preventive care services. In addition, pregnant adolescents are less likely to seek antenatal care because they conceal the pregnancy and the response is frequently to try to obtain an abortion (Mbonye, et al. 2005).

Stigma

More than a third of the respondents identified stigma as one of the factors that hinders health seeking practices. This is similar to findings by Agampodi, et al. (2008); Wood and Aggleton, (2008) and Atuyambe, et al. (2005). They reported that stigma, as a result of pregnancy, makes adolescents keep away from public places and is a hindrance to health seeking practices. Furthermore, the majority of the respondents reported stigma, adult women and adolescents attending the same clinic at the same time, and inconvenient clinic hours for adolescents as reasons indicating lack of availability of youth friendly services. This explains some reasons for poor health seeking practices by pregnant adolescents. Most adolescents prefer not to receive services in the same place as adults because of social stigma attached to pregnancy. Provision of youth friendly services may reduce stigma attached to adolescent pregnancy hence promoting health seeking practices. Adolescents reported experiencing several social problems during pregnancy because of stigma. The results revealed that respondents were rejected

by parents, and others, which included partners. Adolescents were chased away from home, laughed at, not talked to by either their parents, friends and the community, and partners denied responsibility. This is in line with results in Uganda by Atuyambe, et al. (2005) that unmarried pregnant adolescents may not stay in the same house as their parents because teen-age pregnancy brings shame to the family and society blames the family for poor upbringing of their daughter. This leads adolescents to hide the pregnancy from the family, friends, and the community because of fear for rejection and may further lead to delay in seeking care. Furthermore, partners may deny impregnating adolescents because they feel they do not have the capacity to take on family responsibility (Mngadi, Zwane, Allberg & Ransjo, 2003; Atuyambe, et al. 2005).

Other Factors

The study results indicate that other psychological factors that hinder pregnant adolescent's health seeking practices included reluctance to seek care, shyness, fear, denial, and concealed pregnancy. This concurs with the findings by Biddlecom, et al. (2008) that adolescents in Malawi frequently report feeling afraid, embarrassed, or shy and reluctant to seek health services. Fear that others might get to know of their visit and shame about their conduct was also reported by Wood and Jewkes (2006). This was also observed by Kanthiti (2007) in a review of studies and documents from selected Asian and African countries including Malawi. However, shyness, fear, inadequate knowledge, denial, and concealed pregnancy were also mentioned in this study (Table 9) as reasons that cause adolescents not to disclose their pregnancy. This implies that adolescent's Reasons for not disclosing about the pregnancy may also hinder the pregnant adolescent's health seeking practices.

Depression and low self esteem are common conditions and usually associated with social and health consequences. According to Agampoli, et al. (2008), pregnant adolescents have lower self esteem and those with depression have lower self efficacy therefore they are less likely to seek care. Interestingly, the results of this study showed that none of the participants mentioned low self esteem and depression as factors that hinder adolescent health seeking practices during pregnancy. Additionally, more than half of the respondents were married. This could suggest that pregnant adolescents who sought help in these health centres were not depressed and had high self esteem because they were married. While unmarried pregnant adolescents are considered, to a certain extent, as a deviant behavior because they are socially not expected to be sexually active and hence not to start child bearing, married adolescents who become pregnant are considered unproblematic. Society expects married adolescents to have children regardless of age (Chimbiri, 2007). This supports the findings by Zabin and Kiragu, (1998) that in countries where girls are forced into early marriage, they are expected to begin their families during adolescence since adolescent pregnancy is considered as a social norm for marriage and as a proof of fertility. As such, many young married women do not see pregnancy as a significant problem (Save the Children USA, 2000).

Health service factors

The study identified health service factors that hinder and promote the pregnant adolescent's health seeking practices. The health service factors that hinder the pregnant adolescent's health seeking practices included distance, transport, lack of provision of Adolescent friendly services, negative attitudes of staff, inaccessible roads and inavailability of health facilities.

Distance

The distance women had to travel to obtain the services had a major effect on health seeking behavior highlighting distance as a barrier to utilization of services. The results showed that almost two-thirds of the participants identified that the distance from home to the health facility was very far. This implies that distance was a hindrance to health seeking practices. Distance was also identified as a hindrance to RH services during the assessment of RH Service in the Sector Wide Approach (SWAp) context in Malawi (MOH, 2008). In most rural areas, one in three women lives more than 5 kilometers from the nearest health facility, and 80% of rural women live more than five kilometers from the nearest hospital (AbouZahr, 1998). This implies that distance may be a limiting factor to seeking care. If services are situated far from the adolescent's homes, it may be a discouragement to seek care and thus cause delay in seeking care. A study done by Atuyambe, et al. (2008) confirmed that adolescents who live in neighborhoods with an antenatal care clinic were more likely to begin receiving care earlier in pregnancy. On the contrary, Onayade, Sule and Elusiyani (2006) remarked that this may not always be the case if women, particularly adolescents, live in close proximity to a facility. In South Africa, Elhers and Maja (2001) discovered that pregnant adolescents were not always able to visit the facility for pregnancy-related complications even if the health facility was very near. Reasons for the poor attendance were not given; however, the majority was still attending school during clinic hours. They may attempted to continue with their schooling and experienced problems to attend antenatal clinic after school. This implies that some pregnant adolescents are less likely to seek formal health services early even when the services are available or within a walking distance.

Lack Of Youth Friendly Services

The results revealed that the services which were provided were not consistent with youth friendly practices. Apart from stigma which has been discussed, respondents identified negative attitudes of staff as one of the reasons which hindered provision of youth friendly services. Other reasons identified were; adult women and adolescents attending the same clinic at the same time, inconvenient clinic hours for adolescents, and special information for adolescents not provided. This has also been reported by Sendrowitz (1999).

Attitudes Of Health Workers

Attitudes of health workers are important because they determine whether services are attractive to clients or not (WHO, 2004). Where health workers are perceived to be hostile and unfriendly, adolescents may avoid health services. Instead, they rely on family members, and/or traditional birth attendants for any care. This can lead to serious delays in seeking care for pregnancy related complications. A study on problems and experiences of pregnant adolescents by Atuyambe, et al. (2005) reported that health workers did not respond adequately to the adolescent's needs. They were said to be harsh, abusive, and they blamed the adolescents for getting pregnant. In Swaziland, Mgadi, (2007) cited in Atuyambe, et al. (2008) observed that midwives were impersonal towards adolescents and did not greet them and even orient them to the system. This could be due to lack of willingness to provide services to adolescents or insufficient training.

Interventions in providing adolescent friendly services including antenatal care may improve access to and utilization of reproductive health services leading to reduced morbidity from unwanted or adolescent pregnancies (Mbonye, 2003). This is also in line

with a review of integrated adolescent friendly services by Brabin (1998) which stressed the importance of central location and opening hours that are convenient to adolescents.

Other challenges reported by the respondents were; transport, inaccessible roads, cost, lack of availability, and lack of awareness of health facilities. Scarcity of transport, especially in the rural areas, and poor road conditions can make it extremely difficult for pregnant adolescents to reach a health care facility (AbouZahr, 1998). This suggests that transportation difficulties contribute significantly in underutilization of services.
In rural Tanzania for example, 84% of women who gave birth at home intended to deliver at the facility, but did not because of lack of transport (Lule & Ssembataya, 1996). This shows that even if the decision to seek care is timely, in some circumstances, there is a delay in arriving on time at the health-care facility because of transport, which may be costly or unavailable.

Inaccessible roads further aggravate the situation (Roye and Bark, 1996 cited in Atuyambe, et al. 2008). Limited access to available health facilities affects the utilization of these facilities (UNICEF, 2008). This is similar to findings by Kaiser (2004) and Warenius (2008). This implies that lack of availability of health services and difficulty in accessing them are obstacles in utilization of services by pregnant adolescent.

Another factor that was identified as a barrier to seek care was cost. However, cost was only identified by just over a tenth of the respondents as a barrier to health seeking practices. This could probably be because the services, which were provided, were free. However, a study by Westaway, Viljoen, Wessie, McIntyre, and Cooper (1998) contradicts these findings. The study revealed that free antenatal services did not guarantee an increase in the utilization of antenatal services. On the other hand, even

when the services are provided free, there may be hidden costs. Other costs such as; clean or fitting clothes and transportation may pose as barriers to adolescents' use of health care services. In this study, transport costs were identified as a barrier to health seeking practices.

Despite strong challenges, more than two-thirds of the respondents were able to identify health service factors that could promote pregnant adolescent's health seeking practices in this study. The factors were; provider's sensitivity on adolescent's issues, free services, skilled care, and other reasons such as good advice, trust, privacy, and confidentiality. In a review of studies and documents from selected Asian and African countries including Malawi, Kanthiti (2007) identified privacy, confidentiality, provider's knowledge on adolescent issues, friendly environment, provider's positive attitudes, availability of services, affordable cost of services, peer involvement, and parental support and approval as factors that can promote youth friendly services. Strategy guidelines for Malawi indicate that provision of YFHS should be accompanied by staff specifically trained, dedicated hours, day and location (MOH, 2006). This implies that in order for pregnant adolescents to obtain adequate care, the antenatal care site should be attractive and inviting, provide a broad range of services by skilled staff, and special efforts should be made to retain adolescents in care. Furthermore, a study in Zimbabwe and Kenya identified confidentiality, short waiting time, low cost and friendly staff as important characteristics of youth friendly services and youth only service, youth involvement and young staff as least important characteristics (Erulkar, Onoka & Phiri, 2005). Factors that promote pregnant adolescent's health seeking practices are very important because they provide satisfaction to consumers of services.

Limitations of the Study

The researcher identified a number of limitations that could affect the generalisability of the research results. The study was conducted in three health centres in Blantyre rural and may be context specific. The results may therefore not be generalisable to pregnant adolescents in other parts of Malawi.

There was possibility of social desirability. The respondents knowing that they were being studied could have given the wrong information in an attempt to please the researcher and this might have had an effect on the results.

Non probability method for sampling selected did not provide the study subjects equal opportunities to be selected. The nature and accessibility of the study population and the inclusion criteria made it difficult to utilize probability sampling methods. This meant that the sample was not a true representation of the study population.

The data obtained was mainly from the respondents presenting to the health facility for care. This meant that data collected was facility based. Therefore the results might have been different if the study had included those who never attended ANC during the period of the study. This meant that they might have been different experiences therefore limiting the generalisability of the findings.

Although the sample population included adolescent mothers who had delivered during the previous six months, the majority of the respondents were antenatal mothers. The results might have been different if the study had included more adolescent mothers delivered within the past six months prior to the period of the study.

Conclusion

The study has explored individual, psychological, and health service factors that

are associated with adolescent health seeking practices during pregnancy. A number of factors emerged as hindering and or promoting adolescent health-seeking practices during pregnancy. The hindering factors were; low level of education, limited decision making power, and inadequate knowledge related to health seeking practices. Other factors were reluctance to open up, stigma, shyness, denial and concealed pregnancy, distance, inaccessible roads, lack of availability of health facilities, transport, cost, negative attitudes of staff, and lack of provision of adolescent friendly services. The factors found to promote health seeking practices were provider's sensitivity on adolescent issues, free services, skilled care, good advice, good treatment and care, trust, privacy and confidentiality.

The factors identified can provide a basis for improving the services thereby promoting adolescent health seeking practices during pregnancy. This requires establishing and making existing health facilities more adolescent friendly, community empowerment through education on positive health seeking practices, establishing and strengthening out-reach clinics to reach out more pregnant adolescents, and in-service trainings to improve midwives knowledge and skills in the management of pregnant adolescents. Future studies are also required to probe deeper into the factors that influence the pregnant adolescent's health seeking practices.

Recommendations.

The study results highlighted a number of gaps in the utilization of reproductive services by adolescents during pregnancy. Therefore, the following recommendations were made to address the gaps identified in the study:

The results revealed inadequate knowledge on risks of adolescent pregnancy, prevention of possible risks, and commencement of antenatal care. This could be because of low level of education. Low level of education negatively affects the adolescents' comprehension of important information (Matua, 2004). There is need to strengthen health education and counseling for pregnant adolescents.

The hospital as a preferred source of information should use well trained midwives and empower young people to increase their knowledge to provide adolescent pregnancy information. Information on adolescent pregnancy should reach adolescents through a variety of media sources with special focus on use of peer educators, radios, and schools. Out-reach programmes should be established and strengthened to reach out to pregnant adolescents who are still at school, and those in the community.

Life skills education and school health programmes should incorporate and emphasize on issues about adolescent pregnancy and pregnancy prevention. Health promotion interventions that have the most potential to improve outcomes for adolescents such as prevention and management of risk factors associated with pregnant adolescents, use of family planning methods and emergency contraception so that adolescents could delay falling pregnant should be promoted.

The study revealed that decision making of pregnant adolescents was limited. Efforts to increase the adolescent's status and decision-making power within the family and community should be made by encouraging adolescents to continue with education to have the power to make decisions about their own health. Community involvement should be strengthened by empowering parents with knowledge on adolescent pregnancy and their role in providing SRH and adolescent pregnancy information to adolescents.

The results revealed a lack of provision of youth friendly services. In line with youth friendly policy, there is need to establish or make existing health centres more youth friendly. This should be done by ensuring that there is privacy and confidentiality, convenient time for pregnant adolescents, well trained youth friendly midwives and young women, who could make the services attractive to adolescents and change their attitudes. Policies and clinical guidelines regarding pregnant adolescents should be formulated and implemented. Supportive supervision should be strengthened to ensure that midwives are implementing the youth friendly policy.

The study revealed that health care workers had negative attitudes towards pregnant adolescents. In-service trainings on issues related to adolescents and professionalism should be conducted on regular basis. This will help the midwives to meet the needs of pregnant adolescents without judgmental attitudes, have moral obligations to discharge their duties, and follow the code of ethics as determined by the professional guidelines.

The findings of this research suggest that future researchers should conduct this study in other geographical areas prior to the generalization of the results. Systematic evidence on determinants of the pregnant adolescent's health seeking practices is needed. Therefore, there is need to replicate the sample to a bigger geographical area. Another important issue is to probe deeper into the factors that influence the pregnant adolescent's health seeking practices through a qualitative study to obtain in-depth information.

REFERENCES

AbouZahr, C. (1998). Improving access to maternal health services. *Planned Parenthood Challenges.* (1), 6-9.

Agampodi, S.B., Agampodi, T.C. & Piyaseeli, U.K.D. (2008). Adolescent's perception of reproductive health care services in Sri Lanka. *BMC Health Services Research.*8 (98). Retrieved on April 10, 2009, from http://www. biomedicentral.com/1472-6963/8/98

Alan Guttmacher Institute. (2000). Risks and realities of early childbearing. *Alan Guttmacher Institute*

Alauddin, M. & MacLaren, L. (1999). *Reaching newlywed and married adolescents*. *Washington: Focus on Young Adults*. Geneva: World Health Organization.

Allender, J.A. & Spladley, B.W. (2005). *Community health nursing: promoting and protecting the public's health*.(6th ed.). Philadelphia: Lippincott Williams & Wilkins.

Assiimwe, K.J. (2007). Utilization of antenatal services among adolescents in western Uganda Retrieved on August 31, 2010, from http:www.vaps2007.princetonedu/ download.dspx?submission=70085.

Atuyambe, L., Milembe, F., Annika, J., Kirumira, E.K., & Flaxed, E. (2005). Experiences of pregnant adolescents-voices from Wakiso district. *African Health Sciences,* 5(4), 304-309.

Atuyambe, L. Milembe, F., Annika, J., Kirumira, E.K., & Flaxed, E. (2008). Adolescent and adult mothers' health seeking practices during pregnancy and early motherhood in Wakiso district, Central Uganda. *Reproductive Health*, 5 (13). Retrieved on June, 10, 2009, from http://www.Pubmedcentral .nih.gov/ articlerender.fcgi?artid-2648938.

Atuyambe, L., Milembe, F., Annika, J., Kirumira, E.K., & Flaxed, E. (2009). Seeking safety empathy adolescent health seeking behavior during pregnancy and early motherhood in Central Uganda. *Journal of Adolescence,* 32 (4), 781-796.

Balde, M. (2003). *Improvement of the services in reproductive health for adolescents in Guinea.* 7th Congress of the African Society of Gynecology and Obstetrics in Bamako, Mali.

Bankole, A., Biddlecon, A., Guiella, G., Singh, S., & Zulu, E. (2007). Sexual Behavior, knowledge and information sources of very young adolescents in four sub Saharan African countries. *African Journal of Reproductive Health*, 11 (3), 28-43.

Barker, G. (2007). *Adolescents' social support and help-seeking behaviour: An international literature review and program consultation with recommendations for action.* Department of Child and Adolescent Health and Development. Geneva: WHO.

Barua, A. & Kurz K. (2001). Reproductive health seeking by married adolescent girls in Maharashtra, India. *Reproductive Health Matters*, 9, 53–61.

Becker, S., Peters, D.H., Gray, R.H., Gultiano, C. & Black, R.E. (1993). The determinants of use of maternal and child health services in Metro Cebs the Phillipines. *Health Transition Review*, 3 (1), 77-89.

Biddlecom, A. E., Bankole, M., Munthali, A., Singh, S. & Woog, V. (2008). Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Malawi, Ghana, and Uganda. *African Journal of Reproductive Health,*11 (3), 99-100.

Blabin, L. (1998). Improving Antenatal carefor pregnant adolescents in southern Malawi. *Ecta Obstetrica el Gynaecological Scandanavia,* 77(4), 402-409.

Bouweer, M., Dreyer, M., Heselman, S. Lock, M. & Zeele, S. (1997). *Contemporary Trends in community nursing*. Durban: Thomson.

Bowden, J. & Manning, V. (2007). *Health promotion in midwifery. principles and practice attitudes, values and health behaviors*. (2nd ed.). London: Holder Anold.

Burns, N. & Grove, S.K. (2005*). The practice of nursing research: conduct, critique and utilization.* Missouri: Elsevier.

Buvinic M. (1998). The costs of adolescent childbearing: evidence from Chile, Barbados, Guatemala and Mexico. *Studies in Family Planning,* 29: 201-209.

Chaiva, C.N., Roos, J.R. & Elhlers, V.J. (2009). Adolescent mothers non utilization of antenatal care services in Bulawayo, Zimbabwe. *Curationis,* 32 (3), 14-21.

Chiarella G. (1994). Knowledge, attitudes and practices of women concerning pregnancy and child birth. In: Gender, health, and sustainable development: a Latin American perspective. Proceedings of a workshop held in Montevideo, Uruguay, 26-29 April 1994, edited by Pandu Wijeyaratne, Janet Hatcher Roberts, Jennifer Kitts, and Lori Jones Arsenault. *Ottawa, Canada: International Development Research Centre*, 208-19.

Chimbiri, A.M. (2007). The condom 'an intruder' in marriage: evidence from rural Malawi. *Social science and medicine,* 64 (5), 1102-1115.

Dela Cruz, A. (1996). Experience with teenage pregnancy at Eulogio Rodriquez Sr memorial Hospital. *Journal of Philippine Medical Association.* 71, 255-289.

Develay, A., Sauerborn, R. & Diesfeld, H. J. (1996). Utilisation of health care in an African Urban area: results from a household survey in Ouagodougou, Burkina-Faso. *Socio Science Medicine,* 43 (11). 1611-1619.

Dlamini, L.S. & Van der Merwe, M.M. (2002). The development of the teenager in relation to the problems of the teenage mother in Swaziland. *African Journal of Nursing and Midwifery,* 4 (2), 51-55.

Elhers, V. J., & Maja, T. (2001). Adolescent mothers perceptions of reproductive health Services in Garankuwa Area of South Africa. *Journal of Nursing and Midwifery,* 3 (2), 9-11.

Erulkar, A.S., Onoka, C.J. & Phiri, A. (2005). What is youth friendly? Adolescents preferences for Reproductive health services in Kenya and Zimbabwe. *African Journal of Reproductive Health*, 9 (3), 51-58.

Family Care International. (1998). Improve access to maternal health services. *Safe Motherhood Fact Sheet.* New Yolk.

Fitzpatrick, C.C., Fitzpatrick, P.E.,& Turner, M.S. (1997). Profile of patients attending Dublin Adolescent's antenatal booking clinic. *Irish Medical Journal*, 90, 96-97.

Gay, J. et al. (2003).What works: a policy and programme guide to the evidence on Family planning, safe motherhood, and STI/HIV/AIDS interventions. *Module 1– Safe Motherhood.* USAID: Policy Project**.**

George, J. B. (2002). Nursing *theories: the base for professional nursing practice.* 5th ed; Upper Saddle River: Prentice Hall.

Gibson, M.V., Diaz,V.A., Mainous, A.G. & Geesey, M.E. (2005). Prevalence of breast feeding and acculturation in Hispanics: results from NHANES 1999-2000 study. *Birth,*32, 93- 98.

Hopkins, W.G. (2008). Quantitative research design. *sportscience.* Retrieved on July 6, 2009, from http://www.sportsci.org/jour/ool.wghdesign.html.

Ikamari, L.D.E. (2004). Maternal health care utilization in Teso district, Kenya, Africa. *Journal of Health Sciences,* (11), 21-32.

Irinoye, O.O., Adeyamo, A. & Elujoba, A.A. (2002). Care of women during pregnancy and labour by traditional birth attendants in Ili-Ife, Nigeria. *African Journal of Nursing and Midwifery,* 3(2), 4-18.

Iyengar, K. & Iyengar, S. (2000). *Reproductive health on the ground – Meeting women's Needs in southern Rajasthan, India. Udaipur*: Action Research Training for Health. Jaruseviciene, L. & Levasseur, A. (2006). The appropriate gate keeping in the provision of reproductive health care for adolescents in Lithuania: the general practice perspective. *BMC Family Practice 7: 16.* Retrieved on June 30, 2009, from http:www.biomedcentral.com 147-2296/7/16.

Kaiser, M. (2004). The adolescent prenatal questionnaire assessing psychosocial factors that influence transmission to parenthood. *Health Care Women International*. 25, (1), 5-19.

Kanthiti, F.J. (2007). *Factors that facilitate adolescent use of family planning services: a review of studies.* Unpublished master of public health dissertation, University of Malawi, College of Medicine, Blantyre, Malawi. Retrieved on August 11, 2010, from http://www.medcol. mw/commhealth/mph/dissertations/ kanthiti.pdf.

Katz K. & Nare C. (2002). Reproductive health knowledge and use of services among young adults in Dakar, Senegal. *Journal of Biosocial Science*, 34, 215–231.

Kibmobo, R., Neema, S., Moore, A.M. & Ahmed, H. (2008). Adults' perceptions of adolescents' sexual and reproductive health: qualitative evidence from Uganda, *Occasional Report*, New York: Guttmacher Institute, 2008, No. 35. Retrieved on May 25, 2009, from http:www.guttmacher.org.

Kirchengast, S. (2009). Teenage pregnancies – a biomedical and a socio cultural approach to a current problem. *Current Women's Health Reviews,* 5, 1-7.

Kluge, J. (2006). Sex education on adolescents an opportunity for HIV and pregnancy prevention. *Professional Nursing Today*, 10, 20-26.

Koster A, Kemp J. & Offei A. (2002). Utilization of reproductive health services by adolescent boys in the eastern region of Ghana. *African Journal of Reproductive Health*, 5, 40–49.

Kroeger, A. (1983). Athropological and socio-medical health care research in developing countries. *Social Science and Medicine*, 17, 147-161.

Kutzin, J. (2003). *Obstacles to women's access: issues and options for more effective* interventions to improve women's health. Washington DC: The World Bank.

Lawn, J. & Kerber, K. (2006). *Opportunities for Africa's Newborns: Practical data, policy, and programmatic support for newborn care in Africa.* Cape Town, PMNCH, Save the Children, UNFPA, UNICEF, USAID, WHO.

Lemeshow, S., Hosmer, D.W., Klar, J. & Lwangwa, S.K. (1990). *Adequacy of sample size in health studies*. Chicherte: John Willey and Sons. Retrieved on September 16, 2009 from http://www.Epivetnet/samplingtexts.html.

LoBiondo-Wood, G. & Haber, J. (2006). *Nursing research: methods and critical appraisal for evidence-based practice.* (6th ed). St Louis: Mosby Elservier.

Logan, C., Holcombe,E., Manlove, J. & Ryan, S. (2007). *The consequences of unintended childbearing." A white paper prepared by child trends for the national campaign to prevent teen unplanned pregnancy.* Washington D.C. Child Trends.

Lowdermilk, D. L. & Perry, S. E. (2006). *Maternity nursing.(*7th ed.). St Louis Missouri: Elsevier.

Lule, G.S., Tugumisirize, J., & Ndekha, M. (2000). Quality of care and affects of utilisation of maternity services at health centre level. *East African Medical Journal*, 5 (77), 250-255.

Lule,G.C. & Ssembataya, M. (1996). "*Intention to deliver and pregnancy outcomes".* International Development Resource Centre, Nairobi, Kenya.

Mathur, S., Malhotra, A. & Mehta, M. (2002). Adolescents girls' life aspirations and Reproductive Health in Nepal. *Reproductive Health Matters,* 9, 91–100.

Matinga, P.U. (1998). *Improving quality and access to maternal health services for Malawian women. A participatory needs assessment for Blantyre and Nsanje districts.* Safe Motherhood project. Malawi.

Matua, A.G. (2004). Determinants of maternal choices for place of delivery in Ayivu county, Uganda. *African Journal of Nursing and Midwifery*, 8 (1), 31-42.

Mayor, S. (2004). Pregnancy and childbirth are leading causes of death in teenage girls in developing countries. *British Medical Journal*, 328, 1152.

Mbonye, A.K. (2003). Disease and health seeking patterns among adolescents in Uganda. *International Journal of Adolescents Medical Health*, 15 (2), 105-12.

Mbonye, A.K., Neema, S. & Magnussen, P. (2005). Preventing malaria in pregnancy: a study of perceptions. *Policy and Planning*, 21 (1), 17-26.

Meredith, L., Bradley, S., Paddock, S., Jaycox, L., Quinn,V., Chandra, A. & Burnam, A. (2009). Perceived barriers to treatment for adolescent depression. *Medicare,* 27 (6),677- 685**.**

Meyer-Weitz, A., Reddy, P., Ven den Borne, H., Kok, G. & Pietersen, J. (2000). seeking behavior of adolescents attending STD clinics in South Africa. *Journal of Adolescence Health,* 23 (6), 741–752.

Ministry of Health. (2004). *Young people's health strategy and implementation framework* Lilongwe.

Ministry of Health. (2006). National standards for youth friendly health services. Lilongwe.

Ministry of Health. (2008). *The status of Reproductive Health within the Sector Wide Approach* Context Malawi. Towards Universal Access to Reproductive Health. Lilongwe.

Ministry of Health. (2008). *Malawi's health SWAp midterm review*. Norad: Lilongwe.Ministry of Health. (2008). *In-service Training Manual for Maternal and Neonatal Health.* Lilongwe, Malawi.

Mngadi P.T., Zwane, I.T., Allberg, B.M. & Ransjo-Anidson, A.B. (2003). Family Community Support to adolescent mothers in Swaziland. *Journal of Advanced Nursing*, 43 (2), 137-144.

Moultrie, T.A. & McGrath, N. (2007). Teenage fertility falling in South Africa. *South Africa Medical Journal,* 97, 442-443.

Munthali, A.C., Chimbiri, A. & Zulu, E. (2005). Adolescent Sexual and Reproductive Health in Malawi: A Synthesis of Research Evidence, *Occasional Report,* No. 15, New York: The Alan Guttmacher Institute, 2004.

Nanda, A. (2003). *Addressing the reproductive health needs of adolescents in India: directions for programmes. In C. Puri (ed) Towards adulthood: exploring the sexual and adolescents in south Asia*. Geneva: World Health Organisation.

National Statistics Office (NSO) [Malawi], and ORC Macro. (2005). *Malawi Demographic Health Survey 2004.* Calverton, Maryland: NSO and ORC Macro.

National Statistics Office (NSO) & UNICEF (2008). *Malawi multiple indicator cluster survey 2006, final report.* Lilongwe, Malawi: National Statistical Office and UNICEF.

National Statistics Office (NSO) [Malawi], (2010). *Population and housing census 2008, analytical report: volume 1. fertility and nuptiality.* Zomba, Malawi: National Statistics Office (NSO) [Malawi].

Newton, N. (2000). *Applying best practices to youth reproductive health: Lessons learned from seats experience*. Washington DC.

Okonofua, F, (1992). Influence of social economic factors on the treatment and prevention of malaria in pregnant and non pregnant adolescents in Nigeria. *Journal of Tropical Medicine and Hygiene.* 95 (5), 309-315.

Olds, S., London, M., Ladewig, P. & Davison, M. (2004). *Maternal newborn nursing and women's health care* (7th ed). Upper Saddle River: Pearson Prentice Hall.

Onayade, A.A., Sule, S.S., & Elusiyani, S.B. (2006). *Determinants of neonatal mortality at Wesley Gold hospital Illesa Nigeria*. Nigeria and Medicine. 15 (3), 271-276.

Phafoli, S.H.,Van Asswegen, E.J. & Alberts U.U. (2007). Variables influencing delay in antenatal clinic attendance among teenagers in Lesotho. *South African Family Practice Journal*, 49 (9), a-h.

Polit, D. F., & Hungler, P., B. (1999). *Nursing research principles and methods*. (4th ed.). Philadelphia: Lippincolt Williams & Wilkins.

Polit, D.F. & Beck, C.T. (2006). *Essentials of Nursing research methods, appraisal, and utilization.* (6th ed.). Philadelphia: Lippincolt Williams & Wilkins.

Prochaska, J.O. (2005). *Stages of change, readiness and motivation, in*: Kerr, J, Weitkunat R., Morretti M. (ed), ABC of behavior change. A guide to a successful disease prevention and health promotion. London: Elservier Churchill Livingstone.

Reynolds, H.W.,Wong, E.L. & Tucker, H. (2006). Adolescents' use of maternal and child health services in developing countries. *International Family Planning Perspectives,*32 (1), 6-16.

Sari, K.A. (2009). *Socio-Economic and demographic determinants of maternal health care utilization in Indonesia.* Degree of Masters dissertation. The Flinders University of South Australia. Adelaide. Retrieved on September, 2, 2010, from http://www.hp.bkkbn.org/pulin/004population_ data_information/004_aee _SOCIO_ECO NOMIC_and_DEMOGRAPHIC.pdf

Save the Children USA. (2000). *Situation analysis of initiation ceremonies in Mangochi District.* Mangochi: Save the Children.

Save the Children USA. (2004). *Nchanda ni Nchanda Project Final Evaluation Report.* Mangochi: Save the Children.

Senderowitz, J. (1999). *Making reproductive health services youth friendly.* FOCUS on young adults. *Research programme and policy series,* Washington DC. USA. Retrieved on September, 2, 2010, from http://www. pathfind. org/focus.html

Smith, S. (2002). Too much too young? In Nepal more a case of too little, too young. *International Journal of Epidemiology,* 31, 557-558.

Singh, S. (1998). Adolescent childbearing in developing countries: a global review. *Family Planning Perspective,* 29, 117-136.

Singh, S. & Darroch, J.E. (2000). Adolescent pregnancy and childbearing: Levels and trends in developed countries. *Family Planning Perspective,* 32, 14-23.

Swann, C. et al. (2003). *Teenage pregnancy and parenthood: a review of reviews – Evidence Briefing.* London: UK Health Development Agency.

Thaddeus, S., & Maine, D. (1994). "Too far to walk: Maternal mortality in the context". *Social Sciences medicine,* 38, (8).

Treffers, P.E., Olukoya, A.A., Ferguson, B.J. & Lifestrand, J. (2001). Care for adolescent pregnancy and child birth. *International Journal of Gynecology and Obstetrics,* 75 (2), 111-121.

Tyle, H., Haller, D.M., Graham. T., Church Hill. R. & Sanci, L.A. (2007). How are we doing and what more needs to be done? *Lancet,* 369 (9572), 1565-73.

United Nations Children Fund, (2001). *A league table of teenage births in rich nations*. Florence: Italy: Innocenti Research Centre.

United Nations Children Fund. (2008). *A report card on maternal mortality.* New Yolk UNICEF, 45.

United Nations Population Fund. (2003). *State of World Population 2003. Making 1 Billion Count: investing in adolescent health and rights,* New York UNFPA.

Ward, H., Mertens, T.E., & Thomas, C. (2007). Health seeking behavior and control of sexually Transmitted diseases. *Health Policy Plan*. 12 (1), 19-28.

Warenius,L. (2008). *Sexual and reproductive Health services for young people in Kenya and Zambia, providers attitudes, young people's needs and experiences in public health Sciences.* IHCAR 2008, Karolinska Institute: Stockholm.

Westaway, M.S., Viojoen, E., Wessie, G.M., McIntyre, J. & Cooper, P.A. (1998). Monitoring utilization, quality and effecitiveness of free antenatal care in an informal settlement in Gauteng. *Curationis,* 21 (2), 50-59.

Wittenberg, J., Munthali, A. Moore, E., Zulu, N., Madise, M., Mkandawire, F., Limbani, L., Darabi, S. & Konyani S. (2007). *Protecting the Next Generation in Malawi: New Evidence on Adolescent Sexual and Reproductive Health Needs,* New York: Guttmacher Institute.

Wood, K. & Aggleton, P. (2008). *Promoting young people's sexual and reproductive health. stigma, discrimination and human rights.* Thomas Caran Research Unit. Institute of Education University of London. Retrieved on June, 29 from http://www.socstats.soton.ac.uk/cshr/safe passage.htm.

Wood, K. & Jewkes, R (2006). Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters, 14 (27), 109– 118.*

Woodruff, R.J.V, Zimmerli, W.H. & Duncan, D.F. (2006). Reasons youth of color give for not accessing primary health care at a teen clinic. *Journal of Health Promotion,* 4 (2), 175-180.

World Bank. (2010). *The education system in Malawi: Country status report. World Bank working paper no. 182.* Washington DC: World Bank publications.

World Health Organization. (2002).*World Health Organization Antenatal randomized controlled trial: manual for the implementation of the new model*. Geneva: WHO Press.

World Health Organization. (2003). *Global Consultation on adolescent friendly health* services: A consensus statement. Geneva: WHO/FCH/CAH/02.18.

World Health Organization. (2004). *Preventing HIV/AIDS in Young People: A Systematic Review of the Evidence from Developing Countries.* Geneva: WHO Press.

World Health Organization. (2004*). Adolescent pregnancy. Issues in adolescent health and development.* Geneva: WHO Press.

World health Organization. (2005*). WHO STEPS Surveillance Manual: The WHO Stepwise* approach to chronic disease risk factor surveillance. Geneva,World Health Organization. Retrieved on September, 2, 2010, from http://www.who.int.chp/steps**.**

World Health Organization. (2007). Adolescent pregnancy, unmet needs and undone deeds. A review of the literature and program. issues in adolescent health development. Geneva: WHO Press.

Zabin, L.S. & Kiragu, K. (1998). The health consequences of adolescents sexual and Fertility behaviour in Sub Saharan Africa. *Studies on family planning*, *29, 21*.

APPENDICES

Appendix 1

Participant Information Sheet

Factors that are associated with adolescents' health seeking practices during pregnancy

Introduction:

You are being asked to participate in a research study. The study is on ***"****Factors that are associated with adolescent's health seeking practices during pregnancy in Blantyre rural."* Before you decide to participate in this study, it is important for you to understand why the research is being done and what it will involve.

Purpose:

The purpose of this study is to explore factors that are associated with adolescent health seeking practices during pregnancy. The results of the study are expected to assist reproductive health care providers to improve in the management of adolescents during pregnancy, policy makers and educators in the formulation of best strategies for empowering adolescents to value the importance of positive health seeking practices, and raise issues for researchers in order to improve adolescents reproductive health services. For this study, 306 people will be interviewed using a questionnaire.

Procedure:

In participating in this study, you will be asked questions and you will be required to respond to the questions freely and truthfully. You will be giving explanations and descriptions wherever necessary. The discussion will be written down and a tape recorder will be used during the interview to ensure that all the information is captured. The interview will take about 30 minutes.

Your participation in this study is voluntary and you are free to withdraw any time. You have the alternative to choose to participate in this research study. If you do not wish to participate, you could choose not to participate at all. Choosing not to participate or withdrawing from this study will not affect any relationships. You are free to choose not to answer particular questions if you do not want to. You may ask for the tape recorder to be turned off at any point during the interview if there is something that you do not want to have recorded.

Possible Risks:

Your participation in this study may involve the following minimal risks. You may be uncomfortable with some of the questions and topics about your personal situation and feelings about adolescent pregnancy.

This might be uncomfortable for you. If you are uncomfortable, you may decide not to answer the questions or say you do not know. Participation in this research study may result in loss of privacy, since persons other than the investigator might view your records.

Confidentiality:

Information about you will be confidential and no one will identify who answered which question as no names will be written on the questionnaires. Code numbers will be used instead. All questionnaires and responses will be destroyed at the end of the study.

Possible benefits:

There will be no benefits to you by participating in this research study. The potential benefit may include that you and other adolescents will gain a greater insight in factors that hinder and promote adolescent health seeking practices. Your participation in this study will also aid in our understanding of adolescent health seeking practices to improve in the management of adolescents during pregnancy. The results of the study will assist in the formulation of best strategies for empowering adolescents to value the importance of positive health seeking practices, and improve adolescents' reproductive health services.

Financial information:

Your participation in this study will involve no cost to you. You will not be paid for your participation in this study.

Contact Persons:

If you need further information or you are worried about any aspect of the study you may contact Christina Mbiza at cell number 0888874537 or email at (chriembiza@yahoo.co.uk) or Dr Kazembe at telephone number 01751622 or email at (kazembeabigail@hotmail.com

Appendix 2

Consent Form

I have read (or had another person read to me) the information sheet form for this research study and have understood the purpose of the study and the problems involved.

I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told who to contact.

I know I do not have to suffer any harm during the research process but the study will involve minimal risks.

I understand that I will not benefit financially.

I agree to voluntarily to participate in the research study described above, be questioned and provide answers to the best of my knowledge. I understand that Iam free to withdraw anytime without giving reasons and this will not influence the health care given to me.

……	……...	……
Subjects name	Signature	Date
…….	…….……..	……
Name of person taking Consent (If different from the researcher)	Signature	Date

Thank You For Taking Part In This Study.

Zifukwa Zochititsa Atsikana Osachepera zaka 19 Kufuna Kapena Osafuna Chithandizo Pamene Ali Ndi Pakati

Mfundo Zofunika Kuwerenga

Mukufunsidwa kuti mutenge nawo mbali mu kafukufuku wofuna kuwona zifukwa zimene zimachititsa atsikana osachepera zaka 19 kufuna kapena osafuna chithandizo pamene ali ndi pakati. Musanapange chisankho ndikofunika kuti mumvetsetse chifukwa chimene kafukufukuyu akupangidwa ndipo chitachitike kapena chikufunika ndi chani.

Cholinga:

Cholinga cha kafukufukuyu ndi kudziwa zifukwa zimene zimachititsa atsikana osachepera zaka 19 kufuna kapena osafuna chithandizo pamene ali ndi pakati. Zotsatira za kafukufukuyi zidzathandizira anthu omwe amagwira ntchito za uchembere wabwino kupeza njira zothandizira atsikana omwe ali ndi pakati. Zidzathandizansoj atsikanawa kuzindikira kufunika kofuna chithandizo panthawi yomwe ali ndi pakati. Komanso kuti ntchito za umoyo wa atsikana zipite pa tsogolo. Anthu okwana 306 ndi omwe akuyembekezeka kufunsidwa mafunso mukafukufukuyu.

Zochitika mukafukufukuyu:

Mukavomereza kutenga nawo mbali mukafukufukuyu, mufunsidwa mafunso okhudzana ndi zifukwa zimene zimachititsa atsikana kufuna kapena kusafuna chithandizo pamene ali ndi pakati. Mukupephedwa kuyankha mafunso mmene mukudziwira ndi moona mtima. Mukuyenera kufotokoza mmalo ena oyenerera. Zokambiranazi zidzilembedwa ndiponso kujambulidwa mu tape pofuna kuonetsetsa kuti zokambirana zonse zatengedwa. Kufunsa mafunso kumeneku kutha pafupifupi mphindi makumi atatu.

Zovuta zomwe zingaoneke:

Mukafukufukuyi mukumana ndi zovuta koma zosadetsa nkhawa. Mwina mudzasowa mtendere ndi mafunso kapena nkhani zina zomwe zidzafunsidwe ndi kukambidwa. Ngati mukasowe mtendere ndi mafunso ena muli ololedwa kusayankha kapena kunena kuti simukudziwa. Komanso mwina Ufulu wanu oyenera kusunga chinsisi udzaphanyidwa oyang'anira za kafukufukuyi ali ndi mphanvu yoona zomwe zachitika.

Kusunga chinsisi

Panthawi yakafukufukuyi mayankho anu adzasungidwa mwa chinsisi ndipo sidzidzadziwika kuti anayankha mafunso awa ndi ndani chifukwa mayina anu sadzayikidwa pamapepala amafunso mmalo mwake tidzagwiritsa ntchito manambala. Mapepala amafunso ndimayankho onse adzaonongedwa pomaliza pakafukufukuyi.

Phindu la kafukufukuyu:

Mukatenga mbali mukafukufukuyu simudzalipira kalikonse ndiponso mulibe phindu la ndalama. Koma phindu limene lipezeke ndi lakuti inuyo pamodzi ndi atsikana ena muzindikire zifukwa zimene zimapangitsa atsikana omwe ali ndi pakati kufufuza kapena kusafufuza chithandizo kuchipatala pamene ali ndi pakati. Kafukufukuyi atithandizanso kuti

tipeze njira zoyenera zothandizira atsikana omwe ali ndi pakati kuti azindikire ubwino ofunafuna chithandizo pamene ali ndi pakati.

Patapezeka zovuta tingachite chani ?

Ngati mukufuna kudziwa zambiri kapena ngati pangakhale zovuta kapena nkhawa ina ili yonse yokhudzana ndi kafukufukuyi, khalani omasuka ndikuzeretsa madandaulo anu kusukulu ya azamba ku KCN yaku Blantyre ndikuyankhula ndi a Christina Mbiza pa 0888874537 imelo yao ndi chriembiza@yahoo.co.uk kapena ku Lilongwe ndi kuyankhula ndi a Dr A. Kazembe pa 01751622.

Kalata ya Chivomerezo

Zifukwa zimene zimachititsa atsikana osachepera zaka 19 kufuna kapena osafuna chithandizo pamene ali ndi pakati

Ndawerenga (kapena wina wandiwerengera) kalata yolongosola zakafukufuku ali pamwambayu ndipo ndamvetsa cholinga cha kafukufukuyi ndi zovuta zake.

Ndinapatsidwa mwai ofunsa mafunso ndipo mafunso anga ayankhidwa . Ngati pali mafunso ena ndawuzidwa munthu amene ndingamufunse.

Ndikudziwa kuti sindikuyenera kuvulala kapena kupeza vuto munthawi ya kafukufukuyu. Koma pazapezeka zovuta zina zosadetsa nkhawa.

Ndamvetsetsa kuti palibepo phindu la ndalama komanso sindidzapereka ndalama nthawi ya kafukufukuyu.

Ndavomereza kutengapo mbali pa kafukufukuyi mosaumilizidwa, kufunsidwa mafunso ndikuyankha mafunso mmene ndingadziwire. Ndamvetsanso kuti ndili ndi ufulu kusiya nthawi yina ili yonse popanda chifukwa ndipo izi sizizasokoneza chithandizo chomwe ndingalandire.

……	……	……..
Dzina la otenga mbali	Tsiku	Chitsindikizo
…….	……	……..
Dzina la munthu wotsindikiza (ngati simwini kafukufuku)	Tsiku	Chitsindikizo
…….	……	……..
Mwini kafukufuku	Tsiku	Chitsindikizo

Zikomo kwambiri potenga nawo mbali .

Appendix 3

Questionnaire

Factors That Are Associated With Adolescent's Health Seeking Practices During Pregnancy In Blantyre Rural

Date of Interview	
Time of Interview	
Interviewer Name	
Interviewer Number	
Respondent ID	

Section A:

Demographic Data

	QUESTIONS	ANSWERS CODES	SKIP
A 1	How old are you?	13 ……..…………………………………….....1 14 …….………..……………….………...…...2 15 ……..………………………….……….....…....3 16 ……………...………………………..….4 17 ………………………………………….…... 5 18 ………………………………………........ 6 19 …………………………………...….....…7	
A2	Which tribe do you belong to?	Yao ....……..…………………................. 1 Tumbuka.....……….......………....................... 2 Chewa..........…………….…………............……......3 Ngoni...........…………..………............ .... 4 Lomwe..........………… …………................... 5 Sena………………...…………………..……...6 *Other(specify)………..………………………...............7*	
A3	What is your religion?	No religion ……….………..……………....1 Roman Catholic …………...….……………2 Muslim ……………..………………..……….. 3 CCAP …………………...…………………4 Anglican ……………………………….………5 Pentecostal ……………………………......6 Seventh Day Adventist ……………...…...…7 Jehovah's Witness ……………………..….....8 *Other (specify) ……………….…………….9*	

A4	What is your marital status?	Single…... ……..... 1 Married …….....2 Divorced ……..……..3 Separated ……...…4 Widowed…. ……..……..…..5	
A5	Have you ever attended school?	Yes……...……1 No……..... 2	*If no Skip to A 7*
A 6	What is the highest level of your education?	Attended primary school ……...……..…. 1 Completed primary school ……2 attended secondary school ……..…..... 3 Completed form 4 ……..……4 college level ……..……..……..5 University level ……...……6	
A 7	What is your occupation? *(Tick all that apply)*	Student ……..……..……1 Petty trade……..……2 Housewife ……..…... ……..……..…...3 Domestic worker..……..……..…...4 Commercial sex worker……...……. 5 None …..……..…… 6 Don't know ……...……..…… 99 *Other (specify)……..……..…..8*	

Section B.

Individual factors that are associated with pregnant adolescent's Health Seeking Practices

B8	Is it important for a pregnant adolescent to seek care	Yes ……..……..…..... 1 No ..……..…… 2	
B8.1	Why	To be examined and know how they are ……...1 To know how the baby is growing ……..2 To detect problems ……..……. 3 *(Other Specify) ……..……..4*	
B9	Is it important to obtain care from the ANC?	YES …..…… 1 NO ……...……. 2	*If no skip to B 10*

B9.1	Why is it important to obtain care from the ANC? *(tick all that apply)*	Can be examined ……..…… 1 Baby growth can be monitored ……..…….2 Can do a variety of tests...……..……. 3 To receive advice ……...…… 4 To receive treatment……..…… 5 Complications can be detected ……..…… 6 Don't know ……. 99 *Other(specify)…… 7*	
B 10	Can a pregnant adolescent obtain or seek care from a variety of sources?	Yes ……..……...…… 1 No…..…….…….. 2	*If No skip to B 11*
B 10.1	What are these sources? *(tick all that apply)*	Hospital/clinic ……..……...…….....1 Counselors ……..……...…….2 Traditional healers/ TBAs ……...……...3 Elders in the community ……...…….4 Church leaders ……...…….5 Youth programmes ……...……..6 Peers ……..…… 7 *Other specify…… 8*	
B 10.2	From the sources mentioned in 8.1, which one do you, feel is the best source of care for a pregnant adolescent?	Hospital/clinic ……..……..….....1 Counselors ……..…….2 Traditional healers/ TBAs ……..……..…....3 Elders in the community ……..……....4 Church leaders ……..…….... 5 Youth programmes ……..…….....6 Peers ……..…….....… 7 Home ……..…… 8 *Other specify…… 9*	
B10.3	Why is it a best source?	Accessibility ……...……... 1 Convenient time ……..……2 Providers friendly …….…..... 3 Privacy and confidentiality ……....4 Providers sensitive to adolescents needs ……..... 5 Trust ……..…..…….... 6 Familiar with the source …. ……..……....7 Sense of belonging ……..…… .8 Good past experience ……..9 Don't know …… 99 *Other specify ……..10*	
B 11	Do you think quality care is being provided at this ANC?	Yes ……...……..1 No ……..……...2	If yes *Skip to B 12.*

B 11.1	If no, Why? *(tick all that apply)*	Poor midwives' attitudes …….…… . 1 Providers not friendly ……..…… 2 Inconvenient time ……...3 Providers not sensitive to adolescents needs……...4 Bad past experience ……... 5 No sense of belonging ……..…...6 *Other (specify) ……..…..7*	
B12	When are you supposed to start antenatal clinic?	Between 1st month and less than 4 month …….. 1 Between 4th month and less than 6 month…….. 2 From 7 month …… 3 Don't know …… 4	
B 13	How many months pregnant were you when you started antenatal care?	Less than 4 months (1-16 weeks)……..…..1 Between 4 and 6 months (17-24 weeks)……..... 2 Between 6 and 8 months (25-32 weeks)…….…. 3 From 8 months to term (33 weeks-terms) ……....4 Don't know ……..…99	
B13.1	Why did you start seeking e at this gestational age?	Had minor problem ……..….. 1 Had a major problem ……..…... 2 Forced by relatives ……..…… 3 Was afraid ……..…….4 Was shy ……..…….5 Didn't know where to go ……..…. 6 *Other (specify) ……..…..7*	
B14	Do you take medications when you have minor health problems	Yes ……...…….. 1 No ……...……...2	
B 14.1	What type of medications do you take?	Hospital drugs ……..…… 1 Traditional medicines ……...……..……2 Medicine purchased from the shop ……..……. 3 Home remedies ……...……... 4 *Other specify ……..... 5*	
B 14.2	Where do you obtain these medications?	Hospital ……..……... 1 Traditional healer ……..……... 2 Shops ……..…….. 3 Homemade ……..…….. 4 *Other specify ……..…..... 5*	
B 15	Have you ever heard about consequences of adolescent pregnancy?	Yes ……..…..…… 1 No ……..……..…….. 2	*If no skip to B16*

B 15.1	From whom?	ANC ……..…..…. 1 Health workers ……..... 2 Mother ……..... 3 In-laws ……..…….... 4 Relatives ……..…..… 5 Close friend …….……... 6 Radio …….……. 7 At school …….…… 8 *Other (specify)……..…..... 9*	
B 16	What are the physical consequences of adolescent pregnancy?	Obstructed and prolonged labor ……..….. 1 Hypertensive disorders …….……..….. 2 Obstetric fistula …….....……. 3 Anemia …….....….…..... 4 Preterm labor …….....……..… 5 Low birth weight babies ……....……..… 6 *(Other specify) ……..…….7*	
B 16.1	What are the psychological consequences of adolescent pregnancy?	Depression ……..……...…….... 1 Stigma …….……. 2 Discrimination ……...…….... 3 Low self esteem …….……...4 *Other specify ……..…..5*	
B 16.2	What do you think are the social consequences of adolescent pregnancy?	Having to drop out of school ……..…….. 1 No opportunity to return to school ……..…2 Not able to play with friends …….…... 3 Increased poverty ……..… 4 Loss of employment opportunity ……..….. 5 *Other specify ……..... 6*	
B 17	What can a pregnant adolescent do to prevent consequences of pregnancy?	Early antenatal care ……..…… 1 Seek care from a skilled attendant ……..… 2 *Other specify ……..... 3*	
B 18	Are you able to make health care decisions on your own?	Yes ……....…….. 1 No ……...……. 2	*If yes skip to C 19*
B 18.1	If no, who normally makes decisions concerning health care for you?	Husband ……..…… 1 Partner ……..…… 2 Mother ……..…..….. 3 Close friend ……..…..….. 4 Uncle ……..…..….. 5 *Other specify……..... 6*	

Section C:

Psychological Factors that are associated with Pregnant Adolescents Health Seeking Practices

I would like to ask your opinion on certain topics related to pregnant adolescents' health seeking practices.

C 19	Do you think it is necessary to seek care during pregnancy? *Tick where necessary*	Yes ……..……..…… 1 No ……... 2	*If no, skip to C 20*
C19.1	Explain your reason?	Early identification of problems ……..…1 To monitor fetal wellbeing ……..…..2 To monitor mothers health ……..….3 *Other (specify) ……..4*	
C20	Do you require permission from other people to seek care during pregnancy	Yes ……..……1 No ……..…..2	
C20.1	From whom do you get permission?	Husband ……..……..... 1 partner ……..……..……...2 Mother ……... 3 Close friend ……..……... 4 Uncle ……..……... 5 Other specify……..……...6	
C 20.2	Why?	Trust ……...……..... 1 Value our opinions ……...…..... 2 Sensitive to our needs ... ……...…….3 Know us better … ……...…… 4 *Other (specify) ……..…….5*	
C 21	Is it true that adolescents are sometimes reluctant to seek health services during pregnancy?	Yes …… 1 No ……... 2	*If no, skip to C 22*
C 21.1	Why?	Fear ……..……..……....1 Feel embarrassed ……...…….... 2 Past disappointments ……...……..... 3 Lack of confidence ……...……..... 4 Negative experiences ……..……..… 5 Stigma ……..……..... 6 Lack of trust ……..……..... .7 Others (specify) ……..……..... 8	
C 22	Do you think you have been stigmatized because of the pregnancy?	YES ……...……..... 1 NO ……...……..… 2	*If no, skip to C 23*

C 22.1	By who?	Parents ……..…… 1 Friends ……..……..……..... 2 The community ……..…….... 3 Health workers ……..……..……..... 4 Others (specify) ……..…5	
C 23	Did you tell your mother or a relative about the pregnancy soon after you discovered that you were pregnant?	yes ……...……..….. 1 no ……...…..……..…. . 2	
C 23.1	Why?	……. …….	

Section D

Health Service Factors that are associated with Pregnant Adolescents Health Seeking Practices

D 24	Are there any health service factors that hinder a pregnant adolescent from seeking health care?	Yes ……..…. 1 No ……..… 2	*If no, skip to D 25*
D 24.1	What are these health Service factors?	Distance ……..……..... 1 Transport problems …… 2 Inaccessible roads ……..…….. 3 Availability of health facilities ……..4 Awareness of existence of health facilities …… 5 *Other specify……..... 6*	
D 25	How do you rate the Distance from home to the health facility?	Very far ……...…… 1 Far ……..……..…… 2 Not very far ……...……..…… 3 Near ……...….. 4	
D 26	Are there any challenges You face to reach the health facility?	YES ……..….... 1 No ……..…… 2	*If no, skip to D27*
D 27	Do you think youth friendly services should be provided at the ANC during pregnancy?	Yes ……...…… 1 No ……...……...……... 2	

D27.1	Explain your reason?	To improve utilization ……...…… .. 1 To increase access ……...……...2 *Other (specify) ……..…. 3*	*If no, skip to D28*
D 28	Do you think the clinic is providing friendly services for pregnant adolescents?	Yes …….……..1 No ……..... 2	*If yes, go to D28.2*
D 28.1	What makes you say that the services are not friendly for pregnant adolescents?	Negative attitudes towards pregnant adolescent.....1 Stigmatizing pregnant adolescents …..…….....2 Shouting at the pregnant adolescents….……..... 3 *Other specify ……..…..4*	
D 28.2	What makes you say that the services are friendly for pregnant adolescents?	Friendly services …….……..... 1 Convenient time ……...…..2 Skilled care ……..……..... 3 Free services or low cost services ……..…… 4 Privacy ……..…… 5 Confidentiality ……..……. 6 *Other specify ……..…7*	

Zifukwa Zopangitsa Atsikana osachepera zaka 19 kufuna kapena osafuna Chithandizo Pamene Ali Ndi Pakati

Tsiku

Nthawi

Dzina la ofunsa mafunso

Nambala yanu

Chizindikiro chanu

Gawo Loyamba:

Mbiri Yanu

	MAFUNSO	MAYANKHO CODE	SKIP
A 1	Kodi muli ndi zaka zingati?	13 …… 2 15 …… 3 16 …… 4 17 …… 5 18 …… 6 19 …… 7	
A 2	Kodi ndinu a mtundu wanji?	Yao ……..…..…… 1 Tumbuka ……..……. 2 Chewa ……..……..… 3 Ngoni ……..…… 4 Lomwe ……..…. 5 Sena …… 6 *Mitundu ina ……7*	
A 3	Ndinu a mpingo wanji?	Sindimapemphera ……..…... 1 Katolika ……..…….. 2 Chisilamu ……..….. . 3 CCAP …… . 4 Anglican ……..…….. 5 Pentecostal ……..…....6 Seventh Day Adventist ……..……....7 Mboni ……..……8 *Mipingo ina ……..…….. 9*	
A 4	Kodi muli pa banja?	Ayi ……...……..... 1 Eya ……...……..... 2 Timangokhalira limodzi ……... 3 Banja linantha ……...……4 Tinasiyana ……..……5	

A 5	kodi munapitako kusukulu?	Eya ……..…… 1 Ayi ……...……2	
A 6	Nanga sukulu munalekeza pati ?	Sindinamalize ku kupulaimale ..……1 Ndinamaliza ku pulaimale ……..……2 Ndinafika ku sekondare …….....3 Ndinamaliza ku sekondare …….....4 Ku sukulu ya ukadaulo ……..…5	
A 7	Kodi mumagwira ntchito yanji?	Yamuofesi ……..….. 1 Ndimagulitsa malonda ……..…..... 2 Mayi wa pakhomo ……..……. 3 Yokonza pakhomo ……..…… . 4 Ndine woyenda yenda …...…….... 5 Ndimangokhala ……...……..... 6 Sindikudziwa ……..……. 7 *Ntchito zina ……. ..……8*	

Gawo: lachiwiri.

Zifukwa Za Umunthu Zopangitsa Atsikana Osachepera Zaka 19 Kufuna Kapena Osafuna Chithandizo Pamene Ali Ndi Pakati

B8	kodi ndi koyenera kufufuza kuli chithandizo pamene mwazindikira kuti ndinu oyembekezera? (*Chongani poyenera)*	Inde ……..…… 1 Ayi ……..……2	*Ngati mukuti ayi , pitani ku 10*
B8.1	Chifukwa chani?	Ndidziwe kuti ndili bwanji ……..…….....1 Kuona kuti mwana akukula bwanji …….……...2 Ndidziwe ngati ali ndi vuto ...……..... 3 *(Zifukwa zina) ……..……..4*	
B9	Kodi ndibwino kulandira chithandizo ku sikelo ya mayi a pakati?	Eya ……..…… 1 Ayi ……..……2	
B9.1	Chifukwa chiani? *(chongani zoyenera)*	…….…… …… ……	
B10	Kodi kuli malo amene mtsikana oyembekezera angapeze Chithandizo?	Inde …….. 1 Ayi …… 2	

B10.1	Kodi malo amenewa ndi ati?	Kwa alangizi …….. 1 Kwa asing'anga/ azamba …….. 2 Anankungwi …….. 3 Kuchipatala …….. 4 Akulu akulu a mpingo …….. 5 Mabungwe achinyamata…….. 6 Amzanu ……. 7 *Ngati pali ena …… 8*	
B10.2	Kumalo mwatchulawa Kumene mungapeze chithandizo choyenera ndi kuti?	Kwa alangizi …….. 1 Kwa asing'anga/ azamba …….. 2 Anankungwi …….. 3 Kuchipatala …….. 4 Akulu akulu a mpingo …… 5 Mabungwe achinyamata…….. 6 Amzanu ……. 7 *Ngati pali ena …… 8*	
B10.3	Chifukwa chiyani mukuti malo amene mwatchulawa ndikumene mungapeze chithandizo?	Amasamala …… 1 Amatsegula nthawi yoyenera …….. 2 Amasunga chinsisi …….. 3 Othandizira amadziwa zomwe Atsikana amafuna ……..4 Amakhulupiriridwa ……..6 Amadziwika bwino …….. 7 Amaladira bwino. ……..8 Sindikudziwa chili chonse……..99 *Ngati pali zina …… 9*	
B 11	Kodi ku sikelo ya mayi a pakatiyi mukulandirako chithandizo choyenera?	Eya …….. 1 Ayi ……..2	*Ngati mukuti Eya, pitani ku 13*
B11.1	Chifukwa chiani mukuti ayi? *(chongani zoyenera)*	Khalidwe la azamba ndi loipa …….. 1 Azamba ake sachezeka……..2 Samatilandira bwino …….3 Azamba sadziwa zofunikira Atsikana apakati……..4 *Mayankho ena ……5*	
B12	Kodi mwezi woyenera kuyamba sikero ndi wachingati ?	Oyamba …….. 1 Wachiwiri …….. 2 Wachitatu …….. 3 Pakati pa mwezi oyamba ndi wachitatu …..4 Zindikudziwa …….. 99	

B13	Kodi munayamba sikelo muli ndi pakati pa miyezi ingati?	Posapyola miyezi inayi …… 1 Pakati pa miyezi inayi ndi isanu ndi umodzi …. 2 Pakati pa miyez 6 ndi 8 ……..3 Pakati pa Miyezi 8 mpakana nthawi yochira ….4	
B 13.1	Chifukwa chiyani sikelo munayamba pa mwezi umenewu?	Ndinadwala …….….. 1 Ndinkachita mantha ……. ……..…... 2 Ndinkachita manyazi ……..... 3 Ndinkadikira chilorezo …….. …..……..4 Sindinkadziwa kopita …….…….... 5 *(Ngati pali zifukwa zina) ……..…….. 6*	
B14	Kodi mumamwa, mankhwala mukakhala ndi vuto ?	Eya ……...……1 Ayi ……....2	
B 14.1	Kodi mukakhala ndi vuto lofunjka mankhwala mumakawapeza kuti?	Akuchipatala …….…….... 1 Achikuda ……..…….... 2 Ndimakagula ……..……..... 3 Okonza kunyumba ……..…….. …….. 4 *Ngati pali zina* ……..……...5	
B 15	Kodi munanvako za Zovuta zomwe mtsikana amene angatenge pakati asanakulitsitse angakumane nazo?	Eya ……. 1 Ayi …….. 2	*Ngati mukuti ayi, pitani ku 25*
B 15.1	Munanva kuchokera kuti?	Ku sikelo ya mayi apakati ……..…...1 Kwa amayi .....2 Kwa achibale .....3 Kwa anzanga .....4 Pa wailesi .....5 Ku sukulu ……..…..6 *Kwina kumene munanva ……..…..7*	
B 16	Kodi msikana amene watenga pakati ali wa mng'ono angapeze vuto anji mthupi mwake?	Kulephera kubeleka ..... 1 kukhala nthawi yayitali asanabeleke Koma matenda atayamba ..... 2 Matenda othamanga magazi .....3 Matenda akukha mkodzo mosalekeza.....4 Matenda osowa magazi ..... 5 Kuyamba matenda mwana asanakhwime..... 6 Kubereka mwana wang'ono kwambiri .....7 Sangapitilize maphunziro ake ..... 8 umphawi ..... 9 Kusowa ocheza nawo 10	

B 16.1	kodi mtsikana amene watenga pakati angapeze mavuto anji mmaganizo?	kukhumudwa ……..…….....…….... 1 kusalidwa ……..…….....…….... 2 kuzikaikira ……...…….…….....…….....3 *Ngati pali zina …….....……...…4*	
B 16.2	Ndi mavuto anji amene mtsikana wapakati angawapeze, mtsogolo, pagulu kapena ndi anthu ena?	Kusiya sukulu …….....…….... 1 Sangathe kubwerera ku sukulu .....…….…. 2 Kusowa ocheza nawo …….....……. 3 Umphawi …….....…….. 4 Mwayi wantchito umasowa …….....5	
B 17	Kodi mtsikana amene ali ndi pakati angatani kuti apewe zovuta zimenezi?	Ayambe msanga sikelo .....1 Akapeze chithandizo ku chipatala 2	

Gawo lachitatu:

Zifukwa za Mmaganizo Amunthu Zopangitsa Atsikana Osachepera Zaka 19 Kufuna Kapena Osafuna Chithandizo pamene ali ndi pakati

Ndikufunsani mafunso kuti ndidziwe maganizo anu okhuzana ndi kufufuza chithandizo pamene muli ndi pakani.

C18	Kodi ndibwino kufufuza chithandizo pamene muli ndi pakati?	Yes …….....…….... 1 No …….....2	
C18.1	Chifukwa chani? fotokozani	....	
C19	Kodi ndikoyenera kupempha chilorezo kuti mudzayambe sikelo	Yes ……... 1 No ……... 2	
C19.1	Kodi munafunsa kaye ndani kuti mudzayambe sikelo?	Amuna anga ,,…… ……..... 1 Mayi ……..… 2 Bamboo ……..……..…… 3 Mzanga …….. …….....4 amalume ...…….... 5 apongozi ,…….. ……...…...6 alamu ……..…….7 palibe..……8 *ngati pali ena…….. 9*	*Ngati mukuti palibe, pitani ku C 20*
C19.2	Chifukwa chani munafunsa amenewo?	Ndimakhulupirila zimene amakamba ….. ..1 Sindingathe kudziramula mwandekha …... 2 Zikhupirilo ……..3	

		Malamulo a m'banja ……..4 *Ngati pali zina ……..5*	
C 20	Kodi ndi zoona kuti atsikana amene ali ndi pakati amanyinyilika kuti akayambe sikelo?	Eya …… 1 Ayi ……..… 2	
C 20 .1	Nanga ngati amanyinyirika chifukwa chiyani amatero?	Amachita mantha ……... 1 Amachita manyazi …… 2 Anakhumudwako mbuyomu ……..... 3 Samadzikhulupira ……..... 4 Amasalidwa ..…….…..... 6 *Zifukwa zina*…….……... 7	
C 21	Zimamveka kuti mtsikana akatenga pakati amasalidwa. Kodi inu munasalidwako?	Eya …….. 1 Ayi ……...…2	
C 21.1	Munasalidwa ndindani?	Makolo …….……..… 1 Amzanga ……..…..2 Anthu a mmudzi …….……..… 3 Ogwira ku chipatala ……..…..…….. 4 Kuchalichi ……..…....5 *Ngati pali ena* ……..……..… 6	
C 21.2	Munaona zotani?	…… ……..…… ……..……	
C 22	Kodi munaululula kwa makolo anu kapena achibale pamene munazindikira kuti muli ndi pakati?	Inde …….……1 Ayi …….…….. .2	
C 22.1	Chifukwa? *fotokozani*	…… ……	
C 23	Kodi pali zomwe zinkakulepheletsani kufuna msanga chithandizo pa mmene munazindikira kuti muli ndi pakati?	Eya …….…. 1 Ayi …….. 2	*Ngati mukuti ayi, pitani ku 28*

C 23.1	Kodi zomwe zinkakulepheletsani ndi ziti? *(zitchuleni kuti asankhe)*	Manyazi ……. 1 Mantha ……..……... 2 Khalidwe la azamba Losalemekeza odwala……..…. ..3 Kulibe malo oduka mphepo …….4 Kusasunga chinsisi ……..…….…....5 Amatisala ……..…….. 6 Chibwana……..……...….....8 Kusavomereza……..……..... 9 Kubisa mimba ……..…… 10 Kusafuna kumasuka ……..……...12 Miyambo ……..……..…....13 Kusazindikira ……. .....14 *Ngati pali zina ……..15*	
C24	kodi mumatha kudzipangira mwa nokha zoyenera kuchita mukaona kuti muli ndi vuto?	Inde ……..…...…….. 1 Ayi ……..……..…… 2	*Ngati mukuti inde, pitani ku 31*
C 24.1	Ngati simupanga mwanokha zoyenera kuchita, amakupangirani ndi ndani?	Amuna anga ……..…..….. 1 Chibwenzi. ……..……..…… 2 Amayi ….. ……...……. 3 Amzanga ……. ……...…….…… 4 Amalume ……...…… 5 Apongozi ……...…….. 6 Alamu ……7 Ngati pali ena ….……...…… 8	

Gawo La Chinayi:

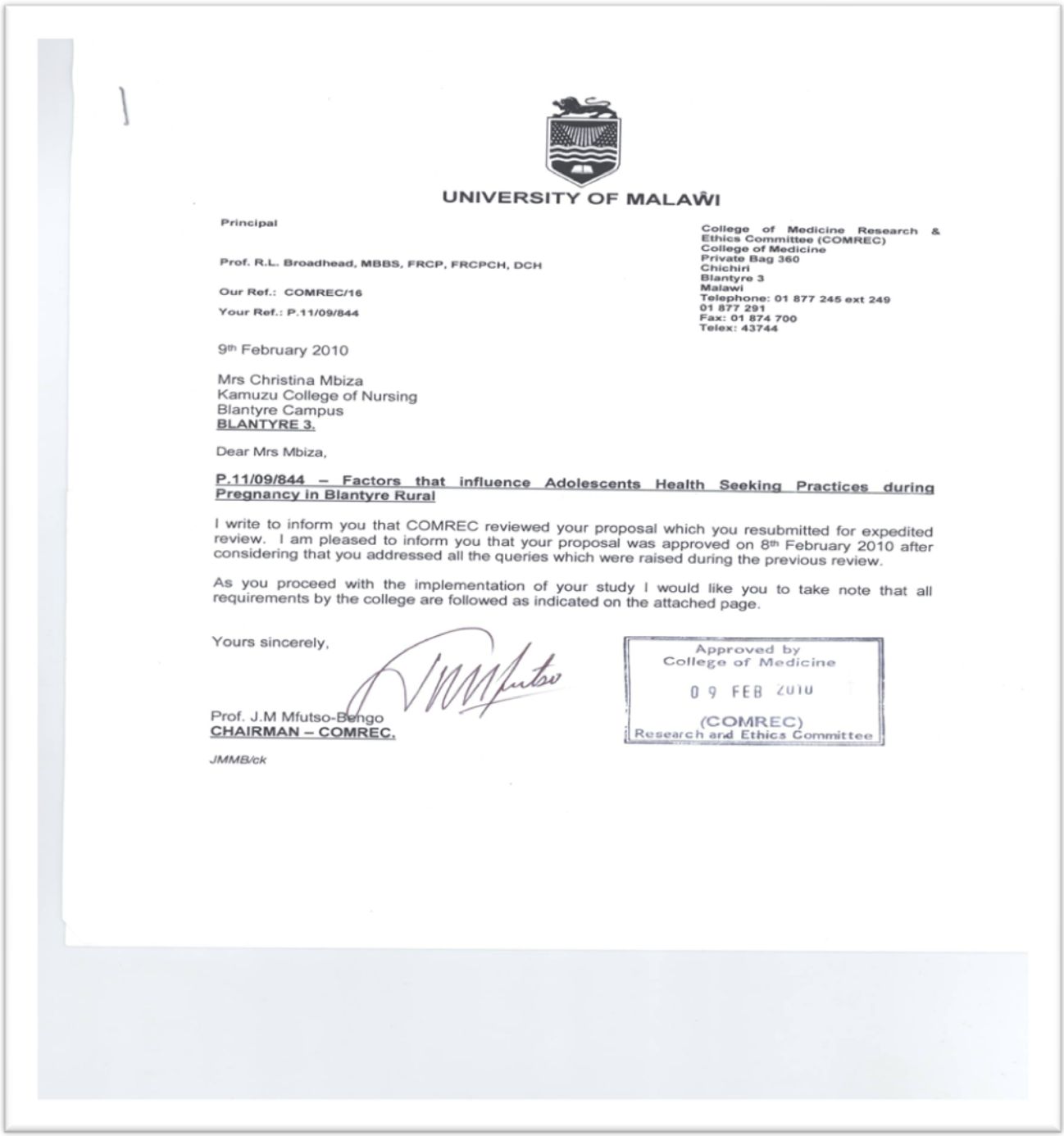
Zifukwa zachipatala zopangitsa atsikana Osachepera Zaka 19 Kufuna Kapena Osafuna chithandizo pamene ali ndi pakati

D 25	Kodi pali zovuta zomwe mumakumana nazo kuti mukafike kuchipatala?	Inde ……... 1 Ayi …….. …2	
D 25.1	Nanga ndi zovuta zanji zomwe mumakumana nazo kuti mukafike ku chipatala	Kutalika ….……..…..... 1 Mayendedwe ……....…... 2 Ndalama zoyendera ….……..…… 3 Misewu yovuta ……. …….……... 4	

		Kusowa kwa chipatala ……..…….…5 Sitidziwa kokapezea chithandizo ……6 Kutalikira chipatala ……...7 Mayendedwe ndi odula ……..….11 *Zovuta zina*……..…….....7	
D 26	Kodi pali mtunda wautali bwanji kuchokera kunyumba kudzafika kuchipatala kuno?	Kutali kwambiri ……..…….....1 Ndipatalibe ……..…..…….…... 2 Sipatali ……..…..…..… 3 Ndipafupi ……...…….. .4	
D27	Kodi ndi bwino kuti atsikana omwe ali ndi pakati akhale ndi nthawi ya sikelo yawoyawo pa chipatala pano?	Eya …….....…… 1 Ayi …….....……2	
D27.1	Ngati mwavomereza, chifukwa chiyani?	Atsikana ambiri adzipita kusikero .....1 Kuti atsikana adzimasuka …….....…..2 Kuti atsikana asamachite manyazi .....3 *Zifukwa zina* ……..... *4*	
D28	Kodi pachipatala pano mukulandira chithandizo choyenera atsikana apakati?	Inde …….....…….. 1 Ayi ……..……...…….. 2	
D29	Chifukwa chiyani mukuti simukulandira chithandizo choyenera atsikana?	Timasakanikirana ndi akuluakulu …...…… 1 Azamba amatisala ……... 2 Nthawi yotsekulira yosayenera atsikana…...3 Samasunga chinsinsi ……..…. 4 Samatiphunzitsa zoyenera atsikana…….... 5 Amationa kwa nthawi yochepa ……...…6 *Zifukwa zina* …… *7*	
D 30	Chifukwa chiyani mukuti mukulandira chithandizo choyenera atsikana?	Amapanga zoyenera atsikana ……...….. .. 1 Amatsekula nthawi yoyenera atsikana ..….. 2 Amasunga chinsisi ……..…..……..... 3 Chithandizo ndi chaulere ……...…. 4 Amatipatsa uphungu oyenera atsikana …... 5 ..*Zifukwa zina* ……..……..…..…*6*	

Appendix 4

Clearance Letter from College of Medicine Research and Ethics Committee (COMREC)



UNIVERSITY OF MALAWI

Principal

Prof. R.L. Broadhead, MBBS, FRCP, FRCPCH, DCH

Our Ref.: COMREC/16

Your Ref.: P.11/09/844

College of Medicine Research & Ethics Committee (COMREC)
College of Medicine
Private Bag 360
Chichiri
Blantyre 3
Malawi
Telephone: 01 877 245 ext 249
01 877 291
Fax: 01 874 700
Telex: 43744

9th February 2010

Mrs Christina Mbiza
Kamuzu College of Nursing
Blantyre Campus
BLANTYRE 3.

Dear Mrs Mbiza,

P.11/09/844 – Factors that influence Adolescents Health Seeking Practices during Pregnancy in Blantyre Rural

I write to inform you that COMREC reviewed your proposal which you resubmitted for expedited review. I am pleased to inform you that your proposal was approved on 8th February 2010 after considering that you addressed all the queries which were raised during the previous review.

As you proceed with the implementation of your study I would like you to take note that all requirements by the college are followed as indicated on the attached page.

Yours sincerely,

Prof. J.M Mfutso-Bengo
CHAIRMAN – COMREC.

JMMB/ck

Approved by
College of Medicine
09 FEB 2010
(COMREC)
Research and Ethics Committee

Appendix 5

Clearance letter from Blantyre District Health Officer

Kamuzu College of Nursing

P.O. Box 415,

BLANTYRE

11th February, 2010.

The District Health Officer,

Blantyre District Health Office,

P. O. Box 66,

BLANTYRE

Dear Sir/ Madam,

RE: PERMISSION FOR APPROVAL TO CONDUCT A RESEARCH STUDY

I write to request for a permission to conduct a pilot study at Ndirande health centre and the main study at N'deka, South Lunzu and Mpemba health centers in your District. The study will be on ***"Factors that influence adolescents' health seeking practices during pregnancy in Blantyre rural."***

Iam currently pursuing Masters Degree in Midwifery at Kamuzu College of Nursing. In partial fulfillment of the program, Iam required to conduct a research study.

My proposal has already been approved by KCN Research and Publications Committee and College of Medicine Research and Ethics Committee (COMREC) and my protocol number is P.11/09/844.

Attached is an abstract for the research study and letter of approval from COMREC.

Your favorable consideration on this matter will be greatly appreciated.

Yours sincerely,

.....

CHRISTINA MBIZA

District Health Officer

16 FEB 2010

16/02/2010 Private Bag 65

Approved