# INVESTIGATING HOUSEHOLD HEALTH EXPENDITURE DURING BIRTH PERIOD IN BLANTYRE DISTRICT, MALAWI

**MSC REPRODUCTIVE HEALTH (POLICY, PLANNING & FINANCING) THESIS**

**ANNIELISA MAJAMANDA KAMBALE**

**SUBMITTED TO THE FACULTY OF MIDWIFERY, NEONATAL AND REPRODUCTIVE HEALTH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN REPRODUCTIVE HEALTH (POLICY, PLANNING & FINANCING)**

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## Declaration

**I**, **Annielisa Majamanda Kambale** hereby declare that this thesis is a result of my own original work and has not been presented for any academic award at the University of Malawi or any other University worldwide.

Annielisa Majamanda Kambale

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**Full Name**

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**Signature**

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**Date**

## Certificate of Approval

The undersigned supervisors approve that this thesis is the student's own work submitted for the award of Master's Degree in Reproductive Health (Policy, Planning & Financing).

Signature_____ Date_____

Masache Gibson,

**Main supervisor**

## Dedication

This thesis is fondly dedicated to all women of Malawi for their brevity in facing the many reproductive health challenges with hope for a better Malawi. In rains and sunshine, you sustain yourself with energy for a better future of babies.

To my husband Charles Kambale and son Christian for your tolerance of all the busy schedules during the two years of my studies. You are a wonderful team. God bless you!

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To all friends whom we started together in this pleasant journey of our achievements in advancing reproductive health studies and management in Malawi and beyond

## Abstract

In Malawi, the majority of women access reproductive health care in public health facilities. The Malawi government policy is for free provision of health services. However, despite the offer of free services, there is now increasing cases of informal payments for members to access services in public health facilities. In public health facilities, informal payments arise as corruption increases resulting in frequent stock outs of essential medical supplies and other informal costs, increased demand of health services due to limited availability of health facilities and shortage of staff. Informal payments are mostly done using out of pocket financing. Effects of these informal payments and other birth related coasts have the potential of denying women services at this critical time as well as access and utilization of services. It is not clear how women are affected by these informal payments while trying to access reproductive health services especially during birth period. This study titled 'Investigating Household health expenditures during birth period in Blantyre District, Malawi' aimed at examining health expenditures during birth period in Malawi.

In this study, a total of 388 Households were recruited using random sampling method. Data were collected on expenditure and cost attributes incurred by Households during birth period using structured questionnaires. Data analysis was conducted using SPSS version 20.0 and Statistics were presented using frequencies, tables and charts.

About 33% of women were asked to make informal payments while accessing birth services at public health facilities such as medicines, Ultra sound scanning services, laboratory services and cesarean section operations among others. Informal payments were propagated by frequent stock outs of essential medicines and supplies. This is where more births (87%) took place. More than 58% of the charges were done using out of pocket payment as only 10% of participants had Health Insurance as a mode of prepayment. Transportation during the birth period costed from MK9000 to MK45, 000 between public

and private transport respectively. More than 50% of women expressed willingness to enrol in a health prepayment organisation if available in their community.

Women rely on public health facilities for birth services because they offer free services. However, informal payments in public health facilities resulting from increasing corruption, increasing demand and limited resources plus other expenses for birth preparedness such as transport are resulting in increased expenditure for birth. Free services are therefore used not as an option but because Households cannot afford paying services using out of pocket expenditures.

Malawi has a significant potential to improve maternal health by strengthening strategies that provide financial risk protection to households. The study recommends the establishment of mechanisms that provide financial risk protection for households to attain universal healthcare. There is a need to scale up awareness among the general population to resist all forms of corruption. There is also need to strengthen accountability and transparency mechanisms in the health system to ensure effective monitoring of resources at all levels.

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## List of Abbreviations

| | |
|---|---|
| **THE:** | Total Health Expenditure |
| **ORT:** | Other Recurrent Transactions |
| **WHO:** | World Health Organization |
| **COMREC:** | College of Medicine Research and Ethics Committee |
| **KCN:** | Kamuzu College of Nursing |
| **CBHI:** | Community- Based Health Insurance |
| **OOP:** | Out of Pocket |
| **LMIC:** | Low and Middle Income Countries |
| **SSA:** | Sub- Saharan Africa |
| **ANC:** | Antenatal Clinic |
| **MK:** | Malawi Kwacha |

## Operational Definitions

**Health Expenditure:** The amounts spent by providers and consumers on healthcare

**Financing mechanism:** A method or source through which funding is made available

**Birth period:** Reproductive period from conception to delivery

**Out of pocket payment:** Purchasing health services using direct cash

**Catastrophic expenditure:** Expenditure that contributes to economic suffering to an individual usually above 40% up from total earnings

# CHAPTER 1

## Introduction and Background

### Introduction

Health care expenditures worldwide are high and challenging to governments in meeting universal access to health care in high, middle and low- income countries (Xu et al., 2007). In Malawi, the Ministry of Health is a major provider of health services at a free cost; providing more than 60% of health services while 29% are provided by Christian Health Association of Malawi (CHAM) and about 11% by the private for-profit sector (Makoka, Kaluwa, & Kambewa, 2007).

The health system is classified into community, primary, secondary and tertiary levels. The primary level health facilities include health centres and Community hospitals while District hospitals fall into the secondary category and tertiary level encompass all Central hospitals. In tertiary health facilities, there is a paying section where services are provided at a reasonable fee largely on cost sharing or recovery basis. Services in Malawi public health facilities are free. Informal payments are mostly done using out of pocket financing. Effects of these informal payments and other birth related coasts have the potential of denying women services at this critical time as well as access and utilization of services. In public health facilities, informal payments arise as corruption increases resulting in frequent stock outs of essential medical supplies, increased demand of health services due to limited availability of health facilities and shortage of staff and other informal costs (Abiiro, Mbera, & De Allegri, 2014a; Tey & Lai, 2013a; Xu et al., 2010). These informal payments are mostly done using out of pocket financing by households whose majority does not have any health prepayment mechanism such as health insurance.

Health care services associated with births attract inevitable costs for households whether services are obtained in public or private hospitals. Costs associated with birth range

from transportation to and from health facilities, Antenatal care (ANC) services, cost of hospitalisation during prenatal, labour and delivery and postnatal and cost of medication. The more the hospital visits, the higher the cost to the mother. Overall service cost will depend on distance to the health facility, type of service and perception of the mother to the facility she is likely to get better service.

The costs are generally higher than what most households in Malawi would afford. A survey at one private and Mission hospital showed a significant difference in the cost of birth services. A normal vaginal delivery costs MK380, 000 and MK650, 000 for a cesarean section at Blantyre Adventist and MK80, 000 for vaginal delivery while cesarean section costs MK300, 000 at Mlambe Mission Hospital which is a CHAM hospital. The Malawi Demographic and Health survey (2015/2016) found that one of the challenges to utilization of maternal health services among 53% of respondents was lack of money to pay for costs at health facilities. This study therefore investigated household health expenditures during birth period in Blantyre District, Malawi.

**Background Information**

Sub-Saharan African (SSA) countries have the lowest health expenditures per capita among the low and middle income countries despite promising to adhere to several international level declarations in a quest to mitigate the challenges of health systems financing. The fundamental declarations include the Abuja declaration (2001) which seeks countries to make an allocation of 15% of the total national budget for health spending (WHO, 2013). The countries adopted universal health coverage (UHC) as a model of delivering Primary Health Care (PHC) (Aregbeshola, 2017; Novignon, Olakojo, & Nonvignon, 2012). However, there is slow progress in achieving the aspirations of the declaration due to financing problems in the region.

More than 75% of health facilities in Sub-Saharan Africa fail to deliver essential health services because national total budget allocation towards health financing is low (Chopra, Daviaud, Pattinson, Fonn, & Lawn, 2009; Kruk, Goldmann, & Galea, 2009; Leive & Xu, 2008). This has led to chronic challenges in availability of essential health services to the people who are supposed to benefit from the universal health coverage hence exposing people to corruption in public health facilities due to high demand and forcing them make informal payments using out of pocket payments.

There is sufficient evidence that out of pocket expenditures contribute to financial catastrophe that drive households into poverty. Globally, more than 150 million people face severe financial difficulties as a result of direct out of pocket payment for health services (WHO, 2014). In Malawi, out of pocket contribution to health financing account for 10% of the total health expenditure for the nation (Government of the Republic of Malawi, 2017). Available documentation places the incidence of OOP independent on private health sector expenditure for health care services rather than public health facility based. It is estimated that private for profit health providers net about 27% of THE of which more than 53.4% of it financed through Out of Pocket (Mchenga, Chiwaula, & Chirwa, 2016).

Household expenditure on health services is increasing in Malawi and other countries due to high demand for advanced technology on diagnostic and treatment regimens in the health sector. The common challenge in developing countries is inadequate resources to cater for the high populations against low investments in health technology and supplies. For instance access to modern reproductive health care among women is still low as available monitoring technology belongs to the ancient world compared to the developed nations. Therefore households are at risk of making catastrophic expenditures.

The World Health Organisation recommended the introduction of subsidies in the health sector in all member states in developing countries as a means of safeguarding

households from impoverishment arising from health spending. Healthcare subsidies are central to reducing poverty and all strategies developed around this notion helps to promote human capital growth

The primary purpose of Public health system subsidies is to increase efficiency and equity to health care services among the households which has not been an achievement along the years. A study conducted by (Perkins et al., 2009; Xu et al., 2010) found that subsidies such as Universal Health Coverage have predisposed households to financial risks in trying to access health services at private clinics and pharmacies because the subsidised services are mostly unavailable in public health facilities.

Malawi is introducing health service reforms by establishing the National health policy aimed at addressing challenges associated with access to essential health services including limited access to health care services, low quality of health services being offered as services are only well presented on paper and not delivered on the ground and inefficiencies of the health system. These challenges arise in the era of increasing demand for health services thereby exacerbating the constrained system which is highly characterised by low human resource capacity, inadequate infrastructure, equipment and medical supplies. Services in public health facilities are much characterised by frequent stock outs of essential health care supplies, diagnostic facilities are not adequate and human resources are also inadequate to cater for the huge populations (Abiiro et al., 2014a; Government of the Republic of Malawi, 2017).

Health related expenditure arise from fees and drugs as well as indirect costs on transportation and food. Kemp, Mann, Simwaka, Salaniponi, & Squire (2007) in their study conducted in Malawi to assess whether the poor can afford free tuberculosis services found that costs associated with Tuberculosis diagnosis were very high even though the services were marked free. The study found that the combined expenditure and lost income was $12

(MK2193) for the period equivalent to 248% of monthly income. In another study conducted by Wang et al.,( 2015), health expenditure for treating non communicable diseases were found to contributed to 54.7% of OOP spending for direct medical and travel costs. The expenditure is high than the mean earnings for households to meet basic needs of life hence pushing the poor into impoverishment. In normal circumstances, basic needs are fundamental to life. High healthcare costs are prohibitory to accessibility and utilisation which negatively impacts on health and wellbeing.

In the African region it is noted that formal and informal health care expenditure do not present much difference and sometimes the informal costs are higher than the formal payments. Driving factors to such occurrences are motivated by frequent shortages of drugs and supplies in public health facilities and people are asked to make purchases out of pocket (NSO, 2017). In Malawi, the majority of households do not have a risk protection to economic shocks.

**Problem Statement**

In Malawi, the majority of women access reproductive health care in public health facilities. However, despite the offer of free services, there is now increasing cases of informal payments for members to access services in public health facilities. The informal payments arise as corruption increases resulting in frequent stock outs of essential medical supplies and other informal costs, increased demand of health services due to limited availability of health facilities and shortage of staff.

Effects of these informal payments and other birth related costs have the potential of denying women services at this critical time as well as access and utilization of services. It is not clear how women are affected by these informal payments while trying to access reproductive health services especially during birth period

## Rationale/ Justification of the Study

As women perceive availability and cost as a limiting factor for seeking reproductive health services, the opportunity for development of associated birth problems such as maternal and neonatal complications is high. According to the Malawi Demographic Health Survey (NSO, 2015) pregnancy related mortality ratio is still high at 497deaths per 100,000 and perinatal mortality stands at 35 per 1000 birth. Informal costs have the potential to reduced use of public health facilities, unsafe deliveries and failure to access other materials required for the newly born babies such as warm clothing.

There was a need for research to establish household health expenditures which affect utilisation of reproductive health services among women of child bearing age.

The findings of this study will assist policy makers, health managers and providers of services related to births in Blantyre district, including Reproductive Health Directorate (RHD) under the Ministry of Health (MOH) and other stakeholders in constructing effective and efficient strategies to help households pay for births. The results will also provide insights into the development of health sector reforms including the establishment of social health insurance and the health fund.

## Objectives of the Study

### Broad objective.

To investigate health expenditures during births for households in Blantyre district

### Specific objectives.

1. Identify costs and responsibilities in paying for costs during births in Blantyre
2. Assess capacity to pay for births in households in Blantyre
3. Assessing methods of spending for births in households in Blantyre
4. Identify strategies for financing births in households in Blantyre

# CHAPTER 2

## Literature Review

### Introduction

Literature review is undertaken to examine what research has already been conducted in a similar field and obtain such findings to support the present study or argument (Burns & Grove, 2011). It is a way of presenting what is known leading to uncovering of what is unknown. This chapter presents a synthesis of literature on health care costs associated with births, capacity of households to pay for births in low and middle income countries and the methods of spending utilized by households in paying for healthcare costs. Strategies for financing births by households have also been reviewed.

Recent journal articles in English dating from 2006 have been reviewed and seminal work beyond 2006 is also included. The following databases were searched: Google Scholar, Pubmed, Pubmed central Medline, CINAHL, Cochrane and Hinari. Articles were searched using the following terms: health And costs, health financing, healthcare spending, Out of Pocket.

### Health Care Costs Associated with Births

Health care costs influence access and utilisation of essential reproductive health services such as antenatal care clinic attendance, delivery by skilled birth attendants and postpartum management of women and babies. Birth planning is an essential component of healthcare costs characterised by knowledge of danger signs, plan for birth by a skilled birth attendant, plan for transportation and plan for saving money (August et al., 2015; Moran et al., 2006; Pacagnella, Cecatti, Osis, & Souza, 2012).

Birth planning and financing increases the capacity of women seeking reproductive health services in time and reduces complications associated with delays to seeking professional health care. Women who are able to finance birth report to the health facility in

time when faced with pregnancy and childbirth complications. They utilise the knowledge obtained from antenatal clinic visits about birth preparedness including saving for birth and make rational decisions regarding care of the pregnancy (August et al., 2015; Essendi et al., 2010; Soubeiga et al., 2014).

Savings for birth are used for paying for direct and indirect costs of obstetric care. These include payments for birth, purchasing of birth accessories such as gloves, wrappers for the expected baby and the mother and drugs for pain management during and after delivery (August et al., 2015; Mubyazi et al., 2010). However, indirect costs of birth have contributed to high levels of out of pocket spending. Women are faced with the need to pay for indirect costs such as transportation to reach the health facility while covering long distances, payment for food while waiting for services at the health facility which usually takes long due to staff shortages in public hospitals (Saksena, Antunes, Xu, Musango, & Carrin, 2011; Wang, Brenner, Leppert, Banda, Kalmus, & Allegri, 2015). Such expenses increase the cost of health care and deter women from accessing the services.

Birth planning and financing increases the uptake of hospital delivery. Women who are financially prepared are reported to have a high likelihood of delivering at a health facility. They are able to plan for means of transportation and identify an emergency care facility where they can access care on time thereby reducing birth complications and preventable maternal deaths. In Burkina Faso a strategic plan was developed with the aim of increasing use of skilled birth attendants, increasing the supply of services and introduced subsidies for obstetric care (Soubeiga et al., 2014).

In Tanzania, studies have found that limitation to the utilisation of ANC services is associated with financial costs involved in accessing care. It was observed that women pay user fees which exist within the ANC package. In addition, they also pay fines and penalties for reporting late or delay to reach the health facility. Women who do not have health

insurance cover usually spend much waiting time while accessing obstetric services which affects domestic services (Mubyazi et al., 2010). This time is in principle a wasted capital if costing is applied.

Another study conducted by Pacagnella et al., (2012) concluded that barriers related to health seeking behaviours are associated with economic problems affecting people. The three delays to seeking care are facilitated by a lack of financial planning for birth which influences decisions both at household and community level. These findings are correlating with those found by Essendi et al., (2010). Essendi et al found that in Kenya, barriers to formal emergency obstetric care services were related to the cost of services, poor physical access which increases the cost of transportation and poor decision making influenced by financial status. Essendi et al also found that husbands prefer to use money on household basic essentials such as foodstuffs over paying for birth services.

**Capacity of Households to Pay for Health in Low and Middle-income Countries**

Spending for health care increases vulnerability to poverty among all population groups in the world which drive people into adverse financial risks. Nearly all households in LMIC are less likely to pay for healthcare without incurring catastrophic expenditures (Kruk et al., 2009; Leive & Xu, 2008). Those in the richest quintile are less likely to borrow and sell assets to finance health bills than those in the low and middle quintiles. The capacity to pay in Turkey is only 2.71% among 60% of all households (Yardim, Cilingiroglu, & Yardim, 2010)

However, another study conducted by McIntyre, Thiede, Dahlgren and Whitehead (2006) reports that only a few households are able to save and provide cash to meet financial costs of illness in Africa. In Malawi, about 0.93% of households are pushed into the poverty trap following catastrophic financial expenditures on healthcare (Mchenga et al., 2016). There is, therefore, a general consensus that nearly all households are prone to financial risks and shocks irrespective of the economic status (Kruk et al., 2009).

## Methods of Spending for Births

### Out of pocket expenditure for health care.

Health systems in LMIC have failed to adequately provide equitable access to health services to the people they serve. There is growing evidence of that OOP spending for health is high and continue to exacerbate poverty and ill health as it contributes to above 70% of health financing in LMIC (Kruk et al., 2009; Leive & Xu, 2008; Zere et al., 2007).

In SSA, OOP payments for health impose a great financial burden on poor households compared to higher income families accounting for10% of expenditure above household income. This has led to financial hardships for household creating catastrophes. Households in poverty zone are vulnerable to illness and face a greater economic burden of expenditure on health which affects access to essential health and reproductive services (De Allegri, Sauerborn, Kouyaté, & Flessa, 2009; Kruk et al., 2009; McIntyre et al., 2006).

Malawi is one of the low-income countries struggling with health system financing. Examination of the National health accounts reveals that government spends about 10% of the national budget on health which is way below the Abuja declaration which recommends a total of 15% allocation to health. Prevalence of OOP is also increasing resulting from stock-outs of drugs and medical supplies which when prescribed are not available and people resort to procuring over the counter. Literature shows that OOP spending covers 26% above the threshold of catastrophic expenditure (Daire & Khalil, 2010; Zere et al., 2010). Such situations present a threat to the economic growth of households and poor health outcomes.

### Health insurance (HI) initiatives.

Health insurance is one of the economic frameworks aimed at protecting people from financial risks against the cost of health care incurred by households. It is envisaged HI can improve access and utilisation of health services as well as reducing the prevalence of OOP

payments which have dragged the poor into catastrophic situations (De Allegri et al., 2009; Donfouet & Mahieu, 2012; Leive & Xu, 2008; Su, Kouyaté, & Flessa, 2006).

The exigency of Community Based Health Insurance follows limited formal health insurance in developing countries where the majority of people live below the poverty line. People cannot afford basic healthcare using direct OOP payment because their earnings usually are hand to mouth. Therefore, poor people do not seek health care on time (Alamgir, Naheed, & Luby, 2010; Kruk, Mbaruku, Rockers, & Galea, 2008; Zere et al., 2007) resulting in medical complications, unnecessary deaths and disability.

CBHI initiatives are best suited for SSA and Malawi. Health system financing in this region faces underfunding due to economic hardships and governments have few pooling sources to effectively fund the health sector. A study conducted by Leive & Xu ( 2008) in fifteen African countries found that there are only a few social insurance schemes in Africa and the most established are in Ghana, Kenya, Tanzania and Rwanda. The study also found that rural people are more prone to financial risks than the urban hence they borrow more to finance OOP expenditure. This limits access and utilisation of health services.

In Malawi, there are no CBHI schemes. The available insurance schemes cover mostly the formal sector because enrollment is based on one's possession of a salary and well-established business. This present a big gap for utilisation of the insurance facility to many households who belong to the informal sector thereby creating inequality to access to health services.

**Summary of Literature Review**

Health systems predominantly in Africa do not exclusively protect households from health shocks. There is enough evidence to show that poor people face catastrophic expenditures to finance health care costs despite free service policy in Malawi and other LMIC. Innovative mechanisms are required which include social health insurance to cover

the marginalised and vulnerable populations. Birth planning and financing strategies improve access and utilisation of reproductive health services and reduce maternal and reproductive disability and deaths.

# CHAPTER 3

# Methodology

## Introduction

Methodology refers to the strategy used in research to collect, analyze and interpret data when undertaking a research study (Leedy & Ormrod, 2010). This chapter presents the study design, setting, population and sample size, inclusion and exclusion criteria, data collection, and analysis and ethical considerations.

## Study Design

A descriptive cross-sectional study using the quantitative methodology was used as a method of inquiry to obtain data. This approach helps generate new knowledge about concepts or topics when limited knowledge or no research is done on the subject (Burns & Grove, 2009; Walter, 2010)

## Population and Sample

### Study population.

Households with women of reproductive age were recruited in the study in Blantyre district. These are households with women of reproductive age who have ever given birth and have an under-five child. Within a range of five years, memories of previous birth are fresh than those who have given birth more than five years. The depreciation of the currency would be realistically applied retrospectively in a five-year period than beyond which may be difficult to capture value significance of the Kwacha currency.

### Sampling method.

Households were selected by random sampling. Households with women of reproductive age were interviewed. Participants were identified with the aid of key informants. The key informants were members of village health committees responsible for under five child monitoring selected by village headmen and work hand in hand with

community nurses and Health surveillance Assistants. The key informants have knowledge of eligible households in their catchment area. Proportionate sampling was done from a total of 6278 households in the catchment area.

**Sample size.**

The study recruited a sample of 388 households. This sample was adequate to investigate health expenditures for birth in the Malawian setting and get perspectives of people on birth financing strategies effective for their communities. The sample size was calculated using Lwangwa & Lemeshow (1991) formula for determining sample sizes in health studies. A 95% confidence interval is used with a precision (*e*) of 5% and p-value of 0.5% representing a 50% margin. There are no studies done in Malawi on health expenditure for birth borne by households so a 50% value was used. Thus

$$n = \frac{z^2 p(1-p)}{e^2}$$

In the formula,

*n* is the number of households

*z* is the value of a normally distributed variable which for a 95% confidence interval is equivalent to 1.96,

*p* is the estimated proportion of households

*e* is the maximum allowed standard error which is the desired accuracy

Therefore; $n = \frac{1.96^2 * 0.5(1-0.5)}{0.05^2}$

$$n = \frac{3.8416 * 0.5(0.5)}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$n$=384

The sample size for the study was 388 households. Increasing the sample size from the calculated minimum size reduces the sampling error thereby increasing the precision and validating the study results for the study population (Polit & Beck, 2010).

**Inclusion criteria.**

Participants to the study were households with women of reproductive age who have given birth in the last five years and undergone focused antenatal, labour and delivery processes. This sample is considered to have a great experience of knowledge of spending for birth.

**Exclusion criteria.**

Households with women who have not given birth within the past five years were not recruited in the study. This population does not have a rich experience of the impact of direct health spending on birth. Households who did not consent to participate in the study upon getting full information regarding the study were not recruited.

**Study Site**

The study was conducted in community households of Manase catchment area which is under Blantyre District Health office in Blantyre district. The catchment comprises of the following strategic areas: Sumani, Mango, Dagalasi, Wiskes, City, Gaka, Chinfiti, Martin A and B, Kampala A and B, Market and Mfumu. Access to the skilled birth attendants in this setting is affected by financial ability and spending for reproductive services requires means of transport and long distances. Accessible public health facilities for these communities are Zingwangwa and Mpemba health centres which require either transport or footing for an average distance of ten to fifteen kilometres while the referral health facilities are Gateway clinic and Queen Elizabeth Central Hospital. On the other hand, this population accesses

private services at Blantyre Adventist Hospitals in central Blantyre commercial district or Mlambe hospital, a CHAM hospital in Lunzu.

The population is located on an area where people are engaged in various formal and informal economic activities which have the potential to influence health financing decisions. Therefore, this setting is a representative of both the rural and urban population who comprises the majority of households in Malawi with diverse economic opportunities.

**Data Collection**

Data for the study was collected using questionnaires developed based on the study specific objectives (Appendix 3). The questionnaire was embedded in Android tablets with epi info software hence the data was collected electronically. Power backup was done using power banks to ensure long period of battery life. The questionnaire was developed by the researcher in English version translated to Chichewa (Appendix 4) which promoted flow and fluency during interviews. Structured face to face interviews were administered to households for a period of 20 minutes. Participants were briefed on the study and face interviews were administered upon getting consent. The researcher and two other research assistants conducted the interviews. The research assistants were briefed on the tool before data collection to ensure uniformity in handling questions when administering the questionnaire. Pre-testing was done in 5 households in Nancholi catchment area to determine the viability of the tool and corrections were made before the actual survey.

Data collection was done for a period of three weeks including weekends in order to capture the working households. Each completed questionnaire was saved to a folder which was later synchronized with cloud to a central server created by a statistician who helped with management of the database.

## Data Management

Each questionnaire was checked for completeness and accuracy before saving and forwarding to the server to clean up errors. Coding of questionnaires was done in order to ensure consistency in developing data set. Coding organises data for easy analysis (Walter, 2010).

## Data Analysis

The data was later retrieved to Statistical Package for Social Sciences (SPSS) version 20.0. Data cleaning and editing was done to remove errors. The data was analysed using SPSS version 20.0 to get measures of statistical significance (Curry & Nunez-Smith, 2015). Descriptive statistics were presented in tables and graphs. Conclusions will be drawn using measures of central tendency such as mean and percentages.

## Reliability and Validity

### Validity.

Validity was tested by content validity. Content validity refers to the degree and appropriateness of an instrument based on items under study (Polit & Beck, 2010). Experts with a speciality in health policy, planning and financing examined the content and construct of the instrument and provided feedback to ensure it addressed specific objectives of the study with the right flow. Content validity ensures quality data as the questions address all objectives of the study based on a comprehensive literature review and expert knowledge.

### Reliability.

Reliability refers to the consistency of a research tool in its ability to measure accuracy and renders it devoid of errors (Polit & Beck, 2010). Reliability in this study was achieved by pre- testing of the instrument. Correction and rephrasing of questions was done so that same responses were obtained each time when the tool was used to collect data. Reliability was also enhanced by a briefing of research assistants before and after piloting.

## Ethical Considerations

The research proposal was submitted to COMREC for approval before conducting the study to validate that ethical issues had been addressed thoroughly. Permission was sought from Blantyre District Health Officer to conduct the study in the district (Appendix 5). The researcher drafted consent forms containing a description of the purpose of the study, benefits and risks and confidentiality (Appendix 1). Information was accessible by the researcher and participants did not provide names. Numbers were be assigned to each household so that confidentiality and privacy were maintained. Each participating household signed a consent form prior to the interview. Participants were assured that information provided would not affect any social and health service packages due to them in the community. Participants were informed of the benefits of the study to the communities at large and that participating does not have direct benefits or risks. Therefore, they could withdraw at any point of the study without any threat.

# CHAPTER 4

## Study Findings

### Introduction

This chapter gives a presentation on findings of a quantitative study on investigating Household health expenditure during birth period in Malawi with specific attention to Blantyre district. It presents results of data analysis using descriptive statistics presented as frequencies, tables and figures. The population for this study was households with women of reproductive age (15-49 years) with an under-five child and the sample size was 388 households.

The study was conducted under the following objectives: Identify costs and responsibilities in paying for costs during births in Blantyre, assess capacity to pay for births in households in Blantyre, assessing methods of spending for births in households in Blantyre and identify strategies for financing births in households in Blantyre

Key findings are presented on household economic status, levels of informal payments, place of delivery, transport costs, antenatal care attendance, cost of birth preparedness, social support system, health prepayment modalities.

### Demographic Characteristics of Participants

Table 1 below presents the demographic characteristics of participants in this study. The majority of participants 97.4% (n = 378) were females within the reproductive age range of 15 to 49 years. The mean age was 27.2years (SD=5.5).

**Table 1: Demographic Characteristics of participants**

| Characteristics | Frequency | Percentage |
|---|---|---|
| **Gender** | | |
| Female | 379 | 97.4 |
| Male | 10 | 2.6 |
| **Age** | | |
| 15-25 | 161 | 41 |
| 26-35 | 190 | 49 |
| 36-49 | 37 | 10 |
| **Marital Status** | | |
| Single | 10 | 2.6 |
| Married | 353 | 91.0 |
| Divorced | 19 | 4.9 |
| Widowed | 6 | 1.5 |
| **Parity** | | |
| 1-5 | 360 | 92.8 |
| Above 5 | 28 | 7.2 |
| **Religion** | | |
| Christianity | 359 | 92.5 |
| Islam | 29 | 7.5 |
| **Occupation** | | |
| Employed | 101 | 26.0 |
| Business | 150 | 38.7 |
| Not employed | 137 | 35.3 |
| **Education** | | |
| Primary | 148 | 38.1 |
| Secondary | 200 | 51.5 |
| Tertiary | 37 | 9.5 |
| Never attended | 3 | 0.8 |

A large proportion of the participants were married (91%) and 4.9% divorced. Participants who were single accounted for 2.6% while those widowed were 1.5%. By religion, the majority were Christians (92.5%) and 7.5% were Moslems.

The family status was categorized into nuclear (two parents and their children only) and extended (a family that includes significant others). Most of the households were nuclear families (68%) and extended 32%. The parity differed among the households. The largest proportion of the households (98.2%) had not more than five children and 7.2% households had more than five. The total number of dependants ranged from 1 to 3 (41.8%) and 4 to 5

(9%) while those with no dependant were 49.2%. The majority of the households (73.5%) had not more than five occupants and about 26.5% had more than six occupants.

**Costs and Responsibilities in Paying for Costs during Births**

The focus on this section was to assess the disposable income in the households and identify the cost of services that participants made during the birth period and also who was responsible for the costs. The components here were income for the households, place of delivery and paying for birth.

In relation to income among the households, only 2% of the households had a monthly mean income of below MK10, 000. About 50% of the households had a monthly mean income accounting between MK10, 000-MK50, 000 while 29% of the households had between MK50, 000-MK100, 000 while 20% got more than MK100, 000.

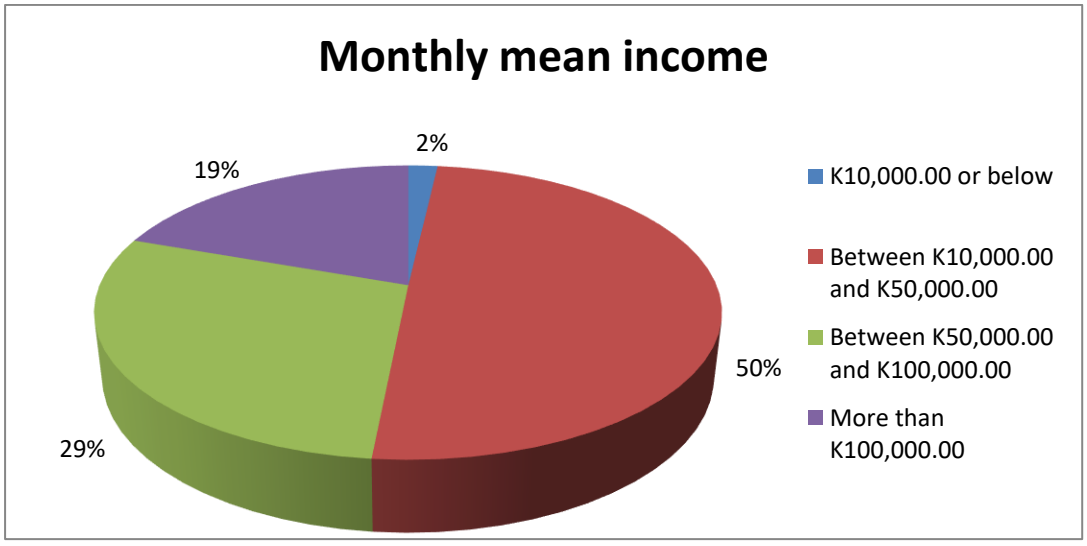


**Figure 1: Monthly mean income**

**Levels of informal payments**

Figure 2 show the proportion of participants who paid for birth services at Public health services. A total of 32.5% of participants expressed that they have ever been asked to pay for birth services in public health facilities.

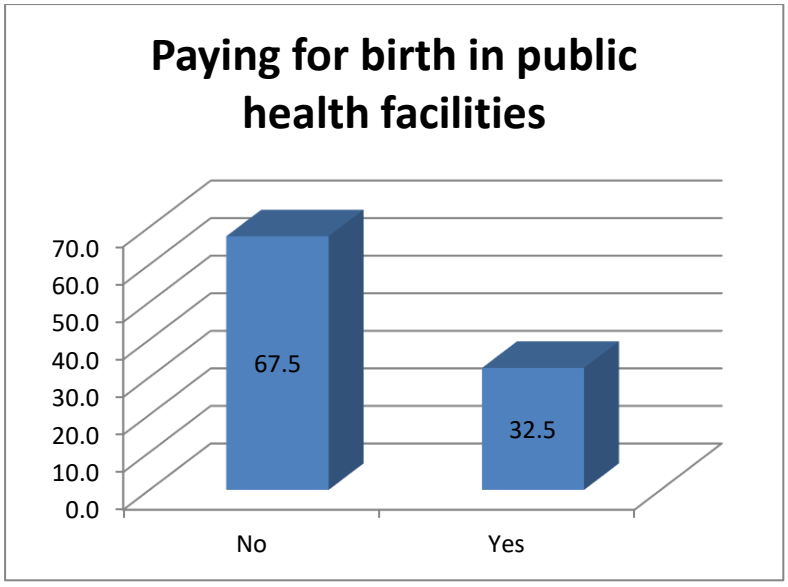


**Figure 2: Paying for birth services in Public health services**

On place of delivery, the majority of participants (87.9%) delivered their last born child at public facility. Those who delivered at paying facility were 11% while home delivery was 1%. None of the participants had their birth at TBA or in transit. The reason for delivering at home was cited as precipitate labour on all participants (n=4). However, all home deliveries were reported to the hospital within twenty-four hours of birth.

On cost of transport, a large proportion (47.4%) paid below MK1000 for a complete trip while 25.3% spent up to MK5000 and 27.3% of participants spent above MK5000.

Antenatal visits are significant in quality of maternal health services. In this study, only 47.4% of participants attended the recommended antenatal clinics schedule of four times. An average proportion of 28.9% attended ANC for three times while 17.8% attended more than four times. Those who attended twice were 4.4% and once at 1.5%. Table 2 shows the frequency of ANC schedule for the participants during pregnancy.

**Table 2: Antenatal visit schedule**

| ANC VISITS | Frequency | Valid Percent |
|---|---|---|
| Once | 6 | 1.5 |
| Two times | 17 | 4.4 |
| Three times | 112 | 28.9 |
| Four times | 184 | 47.4 |
| More than four | 69 | 17.8 |
| Total | 388 | 100.0 |

The cost of birth preparedness was assessed and participants expressed knowledge of essential items that are required in waiting for a birth. These materials are black sheeting, razor blade, umbilical tie, candles, basins, maternity pads, baby clothes, baby utensils, Soap and wrappers. Figure 3 shows the average cost of procuring essentials for preparing for birth.

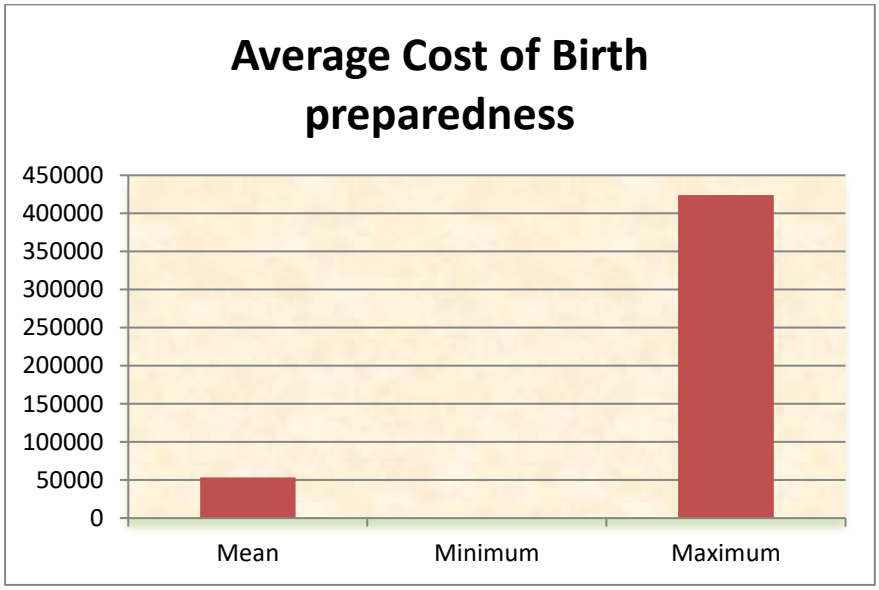


**Figure 3: Cost of Birth Preparedness**

Figure 3 above also shows that almost every participant made expenditure by buying the essential materials for preparing for the birth and the maximum expenditures cost MK424, 000. The mean expenditure for these materials was MK50, 0000.

The majority of participants (83.5%) delivered by spontaneous vertex while caesarean section accounted for 16.5% of all the deliveries in this sample. The mean stay in hospital was One And A Half Days.

**Capacity to Pay for Birth in Households**

Household capacity to pay for birth was assessed using questions that explored the economic status of each household. Areas that explored household capacity were ownership of dwelling units, utility bills, food and reliance on the social support system.

The majority of the participants (66.8%) were residing in rented houses with a mean rental cost of MK10, 000-MK20, 000 while 32.7% resided in personal dwellings. If let out, the mean opportunity cost for the house was MK20, 000-MK40, 000.

In both households, the mean expenditure for household bills was MK10, 000-MK20, 000 per month. Utility bills included energy for heating and lighting and water.

Over 85% of the households were able to provide for meals three times a day thus breakfast, lunch and supper. It will be observed from Table 3 that about 11% of households provide meals twice a day while 4% make food provision for more than four times a day. The majority (71.1) reported no incidence of reducing food consumption in order to cover for hospital bills during birth while 28.9% had their food provision reduced in order to cover for hospital payments during birth.

These households also had children in school at nursery, primary, secondary and tertiary levels. The mean annual payment for academic services was MK45, 201 for nursery, MK21, 910 for Primary and MK29, 209 for secondary schools. A smaller proportion of the

households (9.8) reported having ever withdrawn a child from school in order to save money and cover for hospital payments during the period of preparing for birth.

The study also looked at available sources of social support systems most prevalent in this catchment area. Blood relations comprised the major social support system among the participants (94.7%) while very few relied on church friends, workmates, friends and others.

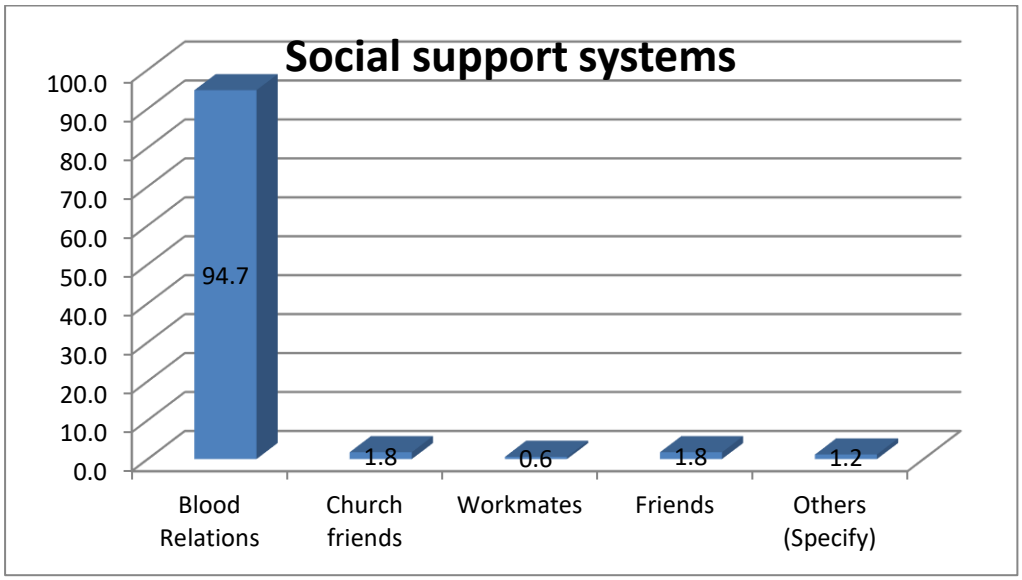


**Figure 4: Social support systems**

**Methods of Paying for Births in Households**

Participants were asked on the methods of paying for birth services. The methods were categorized into two: Out of pocket payment and health insurance scheme. A large proportion of the participants (58.5%) used out of pocket as a method of paying for birth (See Table 3).

Health insurance was reported to be used by a small proportion of households accounting for only 10.3% whereas many of the households (89.7%) were not on any medical cover. Among those who were on health insurance, the majority (97%) were insured by the

Medical Aid Society of Malawi while the remaining 3% were insured by Liberty Health (See Table 3).

**Table 3: Methods of Paying for Births**

| Characteristics | | Frequency | Percentage |
|---|---|---|---|
| Paying directly from out of pocket for hospital charges during birth | Yes | 227 | 58.5 |
| Health insurance scheme enrolment | Yes | 40 | 10.3 |
| Provider of Health Insurance policy | MASM | 39 | 92 |
| | Liberty | 1 | 3 |

**Strategies for Financing Birth in Households**

An assessment was done to identify financing strategies which would be feasible for financing births in households without impoverishment more especially among those not enrolled on a prepayment health insurance scheme. This section presents the willingness to pay, amounts that households were willing to contribute towards health prepayment and preferred strategies for financing birth.

The majority of participants (57%) expressed willingness to enrol in a health prepayment scheme.

Figure 5 below presents the proportion of money that participants were willing to contribute towards health prepayment. A large proportion of participants (90.4%) preferred a contribution of MK200-MK5, 000 for the birth prepayment policy.

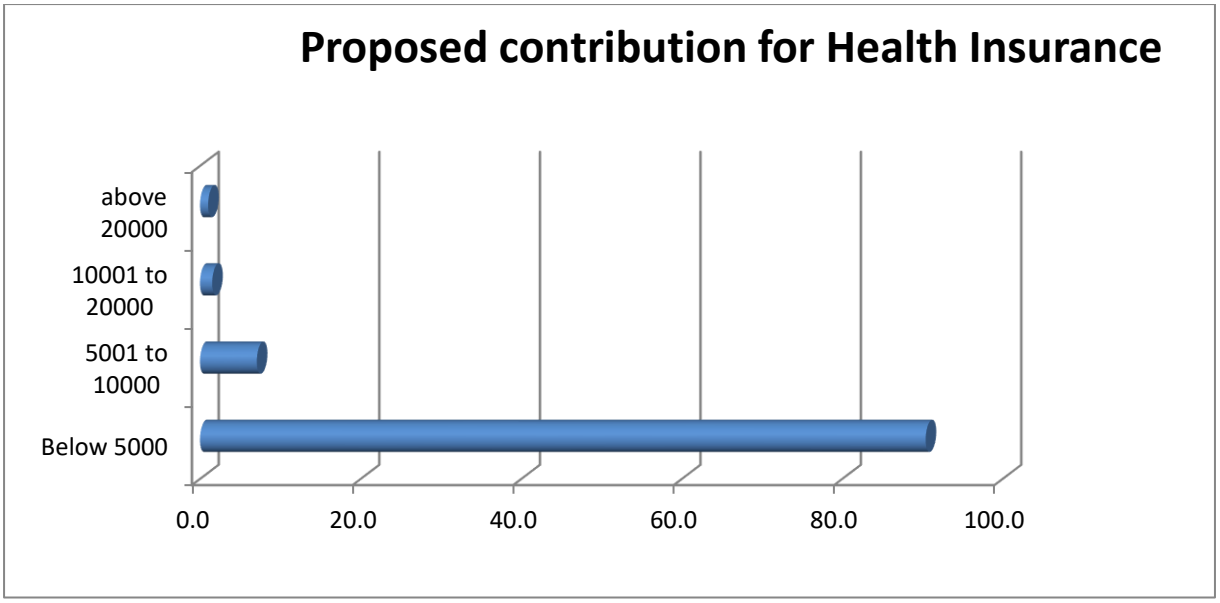


**Figure 5: Proposed contributions for Health Insurance**

The strategies proposed as insurance providers were the following: OOP, insurance, Community Based financing also known as Bank Nkhonde, Groups financing and Birth saving plan from the Bank. Two methods were popular among many participants. Figure 6 shows strategy preference among the participants

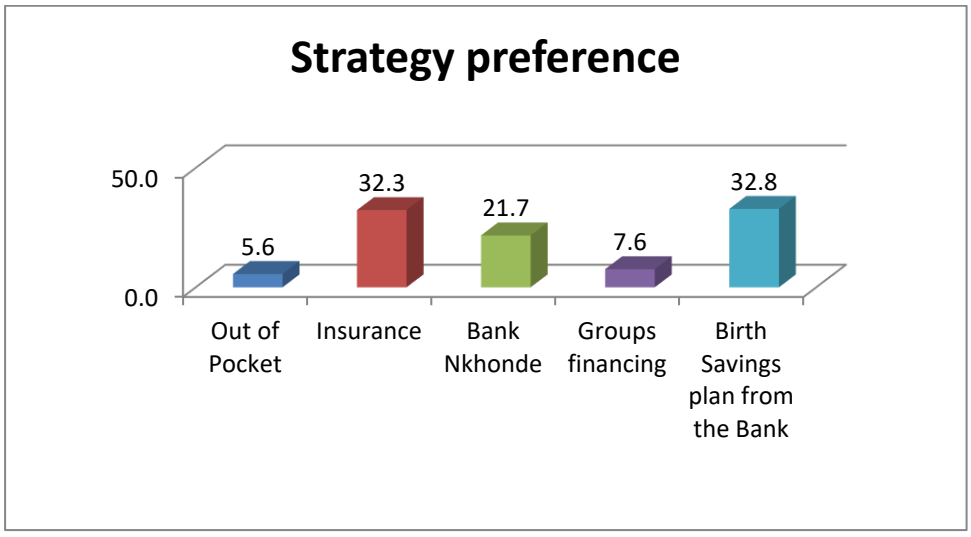


**Figure 6: Strategies for Financing Birth**

It was found that 32.8% of participants chose Birth Savings plan from the Bank followed by health insurance which was preferred by 32.3% of the participants. Bank Nkhonde was nominated by 21.7% of the participants followed by Groups Financing at 7.6%. Only 5.6% of the participants preferred OOP as their strategy of choice (Refer to Figure 6).

# CHAPTER 5

## Discussion, Conclusion and Recommendations

### Introduction

This chapter presents a discussion based on study findings titled investigating household health expenditure during birth period in Blantyre, Malawi. The discussion focuses on birth expenditures incurred by households and costs that are made in an environment where health services are only theoretically free and health insurance is limited in the general population. The discussion relates to findings of other studies conducted locally and in other countries around the globe. A significant proportion of participants acknowledged to have incurred some expenditure on birth services in public health facilities despite a free health service policy which is necessitated by frequent stock outs of essential reproductive and other medical supplies. The costs were made chiefly from out of pocket which has a potential to drive households into poverty. The direct expenditure was done under the counter therefore difficult to quantify while the indirect expenditures were explicit taking more than 30% of household income. Only 10% of participants were enrolled in health insurance as employee benefit package. More than half of participants expressed willingness to be enrolled into a health prepayment scheme.

It also presents the conclusion and recommendations, implications and limitations of the study.

### Birth Expenditure

Every effort to access health services has a certain form of cost attached irrespective of the nature of health policy that a country may adopt. The findings in this study have shown that there are costs associated with seeking maternal health services in Malawi despite the free health service policy.

More than 30% of participants in this study expressed that they had incurred significant costs while accessing reproductive health services in all points of the health service delivery systems. In this study, 88% of participants delivered at public health facility where services are free. However, informal payments are made when women are accessing services such as diagnostic tests like pregnancy tests, haemoglobin test, ultrasound scanning, drugs and supplies, caesarean sections and on management of complications following delivery. This result differs from findings of a study by Abiiro, Mbera, & De Allegri (2014) conducted in rural communities in Malawi which reported that participants were not charged formal or informal fees for services sought in public facilities.

Malawi introduced free health services in 2004 in public health facilities under the Primary Health Care (PHC) as a means of increasing access to health services in the general population. This notion has affected the quality of health services available in public health facilities. Public services are characterised by poor quality due to long queues and stagnation of biotechnology. This has contributed to exigency of corruption and bribes in public health facilities as a means to reduce long waiting times in the form of unofficial fees. This observation corresponds to that made by Amado, Christofides, Pieters, & Rusch (2012) in a study conducted in South Africa where they reported that free public services are associated with long waiting times leading to corruption and bribes.

In this study, 41% of participants were in the age range of 15 to 25 which contributes to two thirds of the Malawi population (MDHS 2015/2016). Young mothers are highly vulnerable to maternal complications during child birth which in turn demand special services and costs placing a great burden on health resources. This observation was also found in a study conducted in Iran by Najati & Gojazadeh (2010) which revealed the high prevalence of maternal and neonatal complications among young mothers. Maternal and neonatal morbidity and mortality is also high among young mothers as they are in the center of financial barriers

due to lack of established financing mechanisms to support their reproductive health decisions. In their study  Kalu-Umeh, Sambo, Idris, & Kurfi (2013) also found that young mothers had no personal income which is essential in supporting maternal health services.

Unofficial fees also exist elsewhere apart from Malawi. Studies conducted in Nigeria, Bangladesh, India and the sub Saharan Africa report that such fees tend to be higher than official fees (Kalu-Umeh et al., 2013; Richard et al., 2013).

The study also found that indirect costs incurred during births were also related to transportation. The common mode of transport was public transport locally known as Matola during antenatal, labour and postnatal period. The study found that transport costs ranged from MK1000- MK5000 ($1.37- $6.82)[1] for a complete visit. This meant that households were required to provide for about MK9000 and MK45000 for Matola and private transport respectively on transport for birth from antenatal to delivery.

Birth preparedness was also found to take a large proportion of household income. Households were required to spend about MK53, 416 ($72.87) as indirect costs on purchasing of essential materials in readiness for receiving a baby. The common items that households were demanded to present during labour were black sheeting, razor blade, umbilical tie, candles, basins, maternity pads, baby clothes, baby utensils, Soap and Zitenje. Some of these materials were supposed to be locally available for free at a public health facilicity where women delivered as part of free delivery package such as Macntosh, sugical blades, umbilical cord clumps, electricity and maternity pads. Women who could aford to buy maternity pads are forced to take rugged pieces of blankets as sanitary pads which poses threat to infections as most of these pieces are unhygienic thereby contributing to pueperal sepsis and other reproductive problems. Such maternal complications are associted with more hospital stays and costs.

[1] Exchange Rate $ 1 = MK 733

The majority of participants had nornal vaginal delivery at public health facilities and only 11% (n=43) participants delivered at private health facilities. The average number of hospital stays after delivery was 2days depending on the outcome of delivery and associated complications. The length of stay is adequate for women and babies to receive care following delivery and monitoring of risk factors in the postnatal period such as haemorrhage which accounts for many maternal deaths in Malawi and beyond ( Kumbani, 2007).

The length of stay varies in countries around the world depending on specific country policy on postnatal management. In a study conducted in 92 countries by Campbell, Cegolon, Macleod, & Benova ( 2016) it was found that the mean stay following vaginal birth was 1.3 - 6.6 days and 2.5-9.3days post cesarean section. This may mean that the length of stay determines the indirect cost of birth after delivery.

The findings of the study indicate that the cost of delivery ranges from free to paying. Free services were obtained in public health facilities whose cost are covered by government through taxes and donor aid. However, more than thirty percent of the women were requested to make informal payments depending on the availability of services and outcome of delivery. The common services on which informal payments were done were drugs, laboratory services, abdominal ultrasound scanning and delivery services.

The study found that private facility deliveries occured in 43 households. These were households on health insurance as part of company policy at their workplace. Participants failed to mention the actual cost following delivery because they just signed a claim form to which little attention on the amount is paid as the payment was not from out of pocket. However, a study conducted by Kululanga, Malata, Chirwa, & Sundby (2012) in Malawi reported that the cost of delivery varies according to type of hospital. The cost at Blantyre Adventist Hospital were MK100,000 for vaginal delivery and MK250,000 for cesarean delivery. The costs were significantly higher compared to the same service at a CHAM

hospital which costed MK50,000 and MK100,000. A phone in survey in these health facilities showed that there is a marked difference as currently, BAH charges MK380,000 and MK650,000 for SVD and C/S respectively. Mlambe is charging MK20, 000 for vaginal delivery and MK80, 000 for cesarean section on low paying side while the cost are a bit higher on the private side at MK80, 000 and MK300, 000 for vaginal delivery and cesarean section respectively.

The costs implied that maternal health services are very expensive in private hospitals where most Malawians cannot afford to pay the exorbitant fees compaired to their mean earninings. Most of the households had low education levels and did not have formal employment as many relied on small businesses as a source of income. This has resulted in low incomes among the households which cannot afford paying for birth services in private health facilities where availability of services is assured. (Tey & Lai, 2013b) in their study conducted in South Asia and the Sub Saharan Africa concluded that higher education is associated with higher household income and wealth which determines the utilization of good health care delivery systems.

Women also have very few alternatives to access to advanced RH services which were not available in public health facilities. The study found that many women identified expensive costs as barriers to access to maternal health services at private health facilities. Education influences the trajectory of health. There is sufficient evidence from literature that women with higher education are better placed to make safe reproductive health decisions due to better understanding and autonomy over finances and health (MDHS, 2015/2016). People who are well educated are able to recognize reproductive health as a priority and put economic efforts towards averting negative effects of ill health by spending significantly on healthcare. At primary and secondary levels of education, the gross income is minimal and priority spending is much placed on basic household needs such as food rather than paying

for health care. In their study, McTavish, Moore, Harper, & Lynch ( 2010) also found that education influences maternal health care use among women because women with high education have access to household financial resources which improves access to birth services.

The average monthly mean income was MK50, 000 in 50% of the households. This was equivalent to $68.49 at the rate of MK730 to a dollar yielding to $2.28 per day. This finding denoted low socioeconomic status of households whose majority had about five occupants. This may mean that availability of financial services for maternal health services reduces with increasing number of people supported by a household. However, reported incomes have proved to be unreliable in most studies conducted (Wang, Brenner, Leppert, Banda, Kalmus, & De Allegri, 2015).

The findings of the study indicate that households spend much of total income on basic needs such as rentals, utility bills, transport costs and school fees and school fund and provide meals for their homes. The fourth Malawi Integrated Household Survey (2016/2017) report indicate that more than half of the people in Malawi have an income base that is able to support daily expenses and/or build savings to cover for shocks. Nationally, the report indicates that over 31% of households use their own savings in overcoming shocks while in Blantyre district alone, about 70% of households utilise the savings as a mitigation strategy for shocks (NSO, 2017).

The study has showed that more than half of households were operating from rented houses with a mean rental cost of MK10, 000 -M K20, 000. For participants residing in their own houses, the mean opportunity cost for their houses was between MK20, 000- MK40, 000. This meant that the cost of accommodation covered about 30% of monthly mean income. Utility bills for heating, lighting and water were found to cost between MK10, 000 - M K20, 000 in 69% of the households, which accounts for about 30% of the mean monthly

income. The families reported of providing at least three meals a day. A survey by NSO (2012) reported that the mean expenditure on food was MK150 per day. The rate on consumption differed between rural and urban setting. The report indicated that consumption per capita for rural people is lower than urban residence. An individual in Blantyre city was reported to consume MK419 per day. This study was conducted in a peri urban setting hence the mean consumption per capita can be implied.

The study results show that there was reliance on the social system in financing birth among the household. The results indicated that blood relations were a sure means of getting financial support for hospital payments. However, this depends on the capacity of available relations to provide funds to others with minimal effect of their family welfare.

It can therefore be concluded from the findings that households have the capacity to contribute to financing their birth. This is so because almost every household is able to provide for the basic needs of the family which exclude formal contribution towards their health.

An assessment on the methods of spending for healthcare among the households revealed presence of two strategies. The findings indicated that Out of Pocket payment is the highly practiced and most utilized method of medical bill payment in more than half of the households. In a study conducted in Tanzania by Kruk et al., (2008) the results also showed that OOP payment was common for settling birth related costs for both official and unofficial fees. In an analysis of the Malawi Health Accounts by Zere et al., (2010) it was also found that OOP was above the threshold for households to incur catastrophic health expenditures at 26%. Catastrophic expenditures occur when 40% of household income is used on health spending (Puteh & Almualm, 2017).

The study found that only 10% of the households were enrolled in a health prepayment scheme provided by the Medical Aid Society of Malawi (MASM). The Malawi

demographic and Health Survey (2015/2016) found that more than 99% of women in Malawi do not have health insurance. This study has found that the common reason cited for not enrolling in the scheme was lack of money in 79% of the households and 13% reported that they needed to discuss with their spouses. The results differs from the ones found by Makoka, Kaluwa, & Kambewa (2007) in which lack of knowledge was the leading cause of non enrolment among non insured members followed by low income in the same group of participants.

The study found that more than half of the participants (57%) expressed willingness to pay (WTP) for Health prepayment. The mean contribution for birth prepayment in those households willing to be enrolled was between MK200-MK5000. This amount is within the requirement for the Econoplan scheme provided by MASM at MK3000 with an annual cover limit of MK1, 400,000 (masmw.com).

There are several strategies for health prepayment in Africa. Several studies have found that community based health insurance is a feasible strategy for local people. Community based health insurance is reported to take good strides in North, west and central Africa and the progress is poor in the sub Saharan Africa (Odeyemi, 2014). Despite the proliferation of CBHI in the SSA women in this study opted for Birth Savings plan and health insurance as strategies for financing birth. Birth Savings plan is operated by some of the banks in the country. Bank Nkhonde was found to be popular among 43 participants.

## Conclusion

The study has shown that health expenditure for birth are on the increase for women accessing birth services in public health facilities despite the fact that the services were supposed to be universally free. Informal payments occur at the point of service delivery and are perpetuated by shortage of diagnostic and pharmaceutical services in public health

facilities. The findings indicate that about 33% of public health service users were subjected to payment of informal charges as they accessed reproductive health services.

Informal expenditures were also incurred in the course of accessing services in form of transport costs and time lost due to long waiting hours and guardianship.

The majority of households make financial allocation favoring basic needs for their families excluding health care costs. Therefore, Out of pocket spending for health care continues to affect many households and is the leading cause of catastrophic health expenditures. The study has found that utilisation of health prepayment is very low even among households with formal employment. Only 10% of households were on health insurance.

More than 50% of participants in the informal sector were willing to enrol in a health prepayment facility which would be available in their communities. Therefore, health insurance providers need to make deliberate efforts to reach to the households that would also benefit from health prepayment.

## Recommendations

Malawi needs to explore innovative financing mechanisms that may strengthen funding in public health sector so that services are available and comprehensive in health facilities thereby reducing inefficiencies, corruption and bribes in form of un official fees. This study, therefore, presents the following recommendations to Policy, Practice and Research:

### Policy

- There is need to strengthen the public health system in ensuring tight auditing and supervision of resources. Those who abuse the system must be held accountable. This may reduce pilferage of resources such as drugs which has recently been on the increase.

- The current tax based systems of health financing needs to be backed up by other strategies which shall incorporate everyone contribute to their health. Those self employed and the ones in the informal sector needs to be included in the health contributory plan because it is difficult to involve them in the taxation system. This can be achieved by propagating establishment of community based health insurance initiatives in which communities are responsible for financial mobilisation and enhance polling. The financial power would also enable communities' access better health services. It would also enhance accountability and reduce abuse of public resources.
- Establish a National Health Fund
- Deliberate measures must be strengthened to promote the education of the girl child so that the social gap does not marginalized women on financial issues.
- Households must be empowered economically so that their earnings can improve and contribute to health prepayment schemes
- The private sector must fulfill the corporate social responsibility role by making some of the essential reproductive health services affordable to all.

**Practice**

The study has found that women are asked to pay for services which were supposed to be provided for free in public health facilities. This has a negative effect on utilization of birth services by skilled birth attendant which in turn would result in more maternal and neonatal complications. Management from Blantyre District Health Office should make provision for availability of essential medical supplies to ensure there is no gap for corruption and bribes in the health facilities.

There is also need to strengthen monitoring on how public health facilities are delivering services. Women reported that those that require diagnostic and surgical services

are kept on waiting list for long until they pay some kickbacks to be considered for treatment. This would increase long stays in the hospital leading to transmission of nosocomial infections and development of complications.

Birth saving plan should be emphasized during health education as an essential component of birth preparedness so that women would be able to pass through the birth period without making catastrophic payments.

**Research**

The study has shown that access to public health services presents challenges to women seeking reproductive health services due to frequent stock outs of essential medical supplies. There is need to investigate if these stock outs are really genuine or as a result of drug pilferage. Research is also required to find out people's satisfaction with the free health service policy and how best can it be improved. Another important area of research is to establish feasibility of public health insurance so that it should be evidence based that people cannot contribute to financing their health rather than taking the perspectives of rights activists only. Providers engaged in health insurance should reach the informal communities and incorporate those who have the capacity despite not being employed.

## Limitations of the Study

Findings of this study cannot be generalised because it was done in one district in Malawi. There is need to extend the study to other districts so that the findings can be applied nationally. Financial and time factors presented another limitation because this study was conducted as a partial fulfilment for the award of academic Masters Degree. The budget allocation surpassed the donor ceiling and the college specifies a time frame for the degree completion.

## Dissemination of Results

Copies of findings of this study will be presented to Blantyre DHO, COMREC and KCN library. Because this study has potential to influence national policy, a copy of findings and recommendations will be presented to the government through Ministry of Health to act as a reference for the reforms in the sector. Furthermore, this research will be shared in dissemination forums and will be published.

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## APPENDICES

### Appendix A: Questionnaire

**Date…../……/2017 Time : Code #.....**

TOPIC: **Investigating Household health expenditures during birth period in Blantyre District, Malawi**

This study seeks to recruit participants of ages 15 to 49 and have their last birth in the past five years. Ask partipant the following questions to check eligibility

How old are you? If below 15 and above 49, thank participant and end discussion. If within 15-49 ask the age of youngest child. If below five years proceed with the interview. If youngest child above five years end the discussion, and go to another household.

**SECTION A: DEMOGRAPHIC FACTORS**

| | Question | Answer and Codes | Comment |
|---|---|---|---|
| A1 | Sex | Male…… 1<br>Female…….. ….. 2 | |
| A2 | | 15-49……... 1 | |
| A3 | What is your marital status? | Single…….. 1<br>Married……... 2<br>Divorced……. 3<br>Widow/widower……. 4<br>Other (specify)…… 5 | |
| A4 | Which religion do you belong to? | Christianity……. 1<br>Islam……... 2<br>Other (specify)…… 3 | |
| A5 | What is your highest level of education? | Primary…… 1<br>Secondary……. 2<br>Tertiary……... 3<br>Never attended…… 4 | |
| A6 | What is the highest level of education for your spouse? | Primary…… 1<br>Secondary……... 2 | |

| | | | |
|---|---|---|---|
| | | Tertiary…… 3<br>Never attended…… 4<br>Not Applicable……..….. 5 | |
| A7 | What is your occupation status?<br>**(allow multiple responses)** | Employed…….. []<br>Businessperson……. … []<br>Not employed…… []<br>Other (specify)…… ... [] | |
| A8 | How would you describe the family status of this household? | Nuclear family…….. 1<br>Extended family…….. 2 | |
| A9 | How many children do you have? | Below 5…….. 1<br>Above 5…… 2 | |
| A10 | How many people live in this household | 5 and below ……. 1<br>6 and above ……. 2 | |
| A11 | How many dependants are you responsible for apart from your children? | Non…….. 1<br>1-3…… 2<br>4-5…… 3 | |
| **Section B: identify costs and responsibilities in paying for costs during births** | | | |
| B1 | Do you know that women pay during births | Yes……... 1<br>No…… 2 | |
| B2 | If yes, which delivery place<br>**(multiple responses allowed)** | At public facility…..……. []<br>Private facility……... []<br>TBA…….. []<br>Home……..... [] | |
| B3 | What is the delivery place for your last born child in this household?<br>(**if home go to B7**) | Public hospital …… 1<br>Private hospital ……... 2<br>Home……... 3<br>TBA……..... 4<br>In transit…….. 5 | |

| | | | |
|---|---|---|---|
| | | Other (specify)…… 6 | |
| B4 | How far is the place where you delivered from your home | Very near ……..… 1<br>Not more than 10 km away…… 2<br>More than 10 km away …….. 3 | |
| B5 | Did you deliver at the facility where you were doing your ANC**(if yes skip B6)** | Yes……. 1<br>No……... 2 | |
| B6 | If No, what are the reasons | ……..<br>…….<br>……..…<br>..……..……. | |
| **If answer to (B3) is home, TBA or in Transit, ask B7, B8 and B9** | | | |
| B7 | What made you not to use a healthy facility? | Distance…….1<br>Service Charges…….2<br>Altitude of health care providers…..3<br>Other (Specify)……..4 | |
| B8 | How long did you take go to the hospital after the delivery of your last born child? | Within 24 hours……. 1<br>Within 48hours to 72hours…… 2<br>After 72hours……..... 3 | |
| B9 | Were there any complications to you or the baby | Yes…… 1<br>No……. 2 | |
| B10 | How do you get to your nearest health facility? | Walk…….…. 1<br>Bicycle taxi……... 2<br>Bicycle…….. 3<br>Motorbike……..… 4<br>Matola…….. 5<br>Car…… 6<br>Other (Specify)……. 7 | |
| B11 | How much is spent on transport per person on a | Below MK1000.00……... 1 | |

| | | | |
|---|---|---|---|
| | complete hospital visit? | MK1000.00-MK5000.00…….. 2<br>Above MK5000.00……... 3 | |
| B12 | How many antenatal visits were made during the last birth? | Once……... 1<br>Two times…….. 2<br>Three times…… 3<br>Four times…….. 4<br>More than four (specify)……5 | |
| **If answer to (B3) is 2 SKIP B13** | | | |
| B13 | Have you ever been asked to pay towards services at a public health facility during the last birth? | Yes……1<br>No ……2 | |
| B14 | What was the mode of delivery of your last birth | Normal…… 1<br>Caesarean section…… 2 | |
| B15 | What materials did you buy in preparation for your last birth? | **Item** C**ost**<br>1 black sheeting [ ] ……<br>2 razor blade [ ]……<br>3 umbilical tie [ ]……<br>4 candles [ ]……<br>5 basins (2) [ ]……<br>6 maternity pads [ ]……<br>7 baby clothes [ ]……<br>8 baby utensils [ ]……<br>9 Soap [ ]……<br>10 Zitenje [ ]……...<br>11 other (specify)…… | |
| B16 | How much money did it cost you to purchase materials in (B15) above? | Calculate totals for question **(B20)**<br>**MK**……. | |
| B17 | How many days were spent in the hospital for the delivery | 1day……[ ]<br>2days……..[ ]<br>3days……..[ ]<br>4days……..[ ] | |

| | | | |
|---|---|---|---|
| | | 5days……..[ ]<br>More than 5days……[ ] | |
| **Section C: Assessing capacity to pay for births in households** | | | |
| C1 | What is the residential status of this house | Personal (**Skip C2**)……. 1<br>Rented (**Skip C3**)……... 2<br>Other…….. 3 | |
| C2 | If rented, how much is paid for rentals monthly | Below MK9, 999.00……. 1<br>Between MK10,000-20, 000……..2<br>Between MK20,001-40, 000……. 3<br>Between MK40,001-50, 000……. 4<br>Above MK50,000.00……. 5 | |
| C3 | If personal, how much would it cost if let out | Below MK9, 999.00……. 1<br>Between MK10,000-20, 000…… 2<br>Between MK20,001-40, 000……. 3<br>Between MK40,001-50, 000……. 4<br>Above MK50,000.00……. 5 | |
| C4 | What source of energy is used for heating | #Charcoal …….. 1<br>#Firewood ……. 2<br>#Electricity……. 3<br>#Generator…….. 4<br>#Solar…….. 5<br>#Coal…… 6<br>(Multiple choices allowed) | |
| C5 | What do you use for lighting? | # Candle…… 1<br># Lantern……... 2<br># Torch…….. 3<br># Electricity…….. 4<br># Generator……... 5<br># Solar…….. 6 | |

| | | | |
|---|---|---|---|
| | | (Multiple choices possible) | |
| C6 | How much do you spend on utility bills per month (electricity, water and charcoal) | Below MK10,000.00…… 1<br>MK10,000-20,000.00……2<br>Above MK20,000.00…… 3 | |
| C7 | How many meals are served per day | Once…… …… 1<br>Two times…… 2<br>Three times…….. 3<br>Four times…… 4 | |
| C8 | How much meat / fish is consumed in a month | Less than 5kgs…….. 1<br>More than 5kgs…….. 2 | |
| C9 | How many children are in school | Nursery……....<br>Primary……<br>Secondary…….....<br>College…… | |
| C10 | How much do you spend on school fees and school fund per year? | **School** **Amount (MK)**<br>Nursery ……..<br>Primary .....<br>Secondary …….....<br>College ...…….. | |
| C11 | Do you own any of the following items | Commercial plot…… [ ]<br>Car……..……... [ ]<br>Television……...… [ ]<br>Radio……...……..,… [ ]<br>Motorcycle…….… [ ]<br>Business entity……...… [ ]<br>Farm…… [ ] | |

| | | | |
|---|---|---|---|
| | | Other (Specify) ……..… [ ]<br>**(Multiple choices allowed)** | |
| C12 | Do you own any savings account with the bank | Yes…….. 1<br>No……... 2 | |
| C13 | Do you own any savings account with microcredit Facility | Yes……..... 1<br>No…… 2 | |
| C14 | Do some person (s) regularly contribute to expenses in this household | Yes…….. 1<br>No…… 2 | |
| C15 | Have you ever sold household properties to cover for hospital bills | Yes…….. 1<br>No…… 2 | |
| C16 | Have you ever borrowed to cover for hospital bills | Yes…….. 1<br>No (**Skip C17**)..……. 2 | |
| C17 | If yes: do you pay interest on the loan you get to pay medical bills | Yes…… 1<br>No…….. 2 | |
| C18 | Have you ever reduced on food consumption in order to cover for hospital charges | Yes…… 1<br>No…….. 2 | |
| C19 | Has any member of the household ever been withdrawn from school in order to save money for paying hospital charges | Yes……. 1<br>No……... 2 | |
| C20 | Do you rely on any assistance from relations and friends to pay for hospital charges | Yes……..… 1<br>No (**Skip C21**)…….. 2 | |
| C21 | If yes, who are the people who helps you with paying for hospital bills during the last birth (how close related are you with the people) | Blood Relations……. 1<br>Church friends…… 2<br>Workmates……. 3<br>Friends…… 4<br>Others (specify)…….. 5 | |
| C22 | How much of your earnings is used for paying household | ≤MK10,000.00……1 | |

| | | | |
|---|---|---|---|
| | expenditures per month | MK10,001.00 and MK50,000.00….2<br>MK50,001and MK100,000.00…….3<br>More than MK100,000.00……4 | |
| **Section D: Assessing methods of spending for births in households**<br>People in this community seek Reproductive health care services at government health facilities approximately 5kilometers away | | | |
| D1 | Have you ever paid directly from your pocket for hospital charges during birth | Yes……1<br>No…….2 | |
| D2 | Are you on any health insurance scheme | Yes……1<br>No…….2 | |
| D3 | If yes, which one | MASM…….1<br>UNIMED……..2<br>Liberty……..3<br>Metropolitan…….4<br>Others (specify)……5 | |
| **Section E: To identify strategies for financing births in Households in Blantyre** | | | |
| E1 | Would you enrol in any health prepayment scheme if available in your neighbourhood | Yes……1<br>No……(**Skip E5**)……...….2 | |
| E2 | If yes, how much would you contribute for health insurance per a month | Indicate…….<br>**MK ……..** | |
| E3 | If No (E2), what are the reasons that may prevent you from enrolling in a health prepayment scheme | ……..<br>…….. | |
| E4 | Which strategy would you like to adopt for your health prepayment | Out of Pocket……. 1<br>Insurance……..... 2<br>Bank Nkhonde…… 3<br>Groups financing…… 4 | |

| | | | |
|---|---|---|---|
| | | Birth Savings plan from the Bank….. 5<br>Other (specify)…… 6 | |

**THANK YOU FOR TAKING PART IN THE STUDY!!!!**

**Appendix B: Ndondomeko ya Mafunso M'Chichewa**

**Tsiku / / 2017 Nthawi Code #.....**

| **Kufufuza za chuma chogwiritsidwa Ntchito pa Ubereki m'dziko la Malawi: Zochitika M'boma la Blantyre, Malawi** | | | |
|---|---|---|---|
| **Mbiri ya otenga mbali pa Kafukufuku** | | | |
| **NO** | **Funso** | **Yankho ndi Code yake** | **Ndemanga** |
| **A1** | Kodi ndinu | Mwamuna…….1<br>Mkazi……2 | |
| **A2** | Kodi muli ndi dzaka zingati | 15-49 | |
| **A3** | Kodi muli pa banja | Ayi sindinakwatire……..1<br>Inde ndiri pa banja……..2<br>Banja linatha……3<br>Mwamuna/mkazi anamwalira….4<br>Zina (fotokozani)……..5 | |
| **A4** | Kodi ndinu a chipembedzo chanji | Chikhristu……..1<br>Chisilamu……2<br>Zina (fotokozani)……3 | |
| **A5** | Kodi maphunziro munalakezera pati | Pulayimale…….1<br>Sekondale……..2<br>Koleji…….3<br>Sindinapiteko……4 | |
| **A6** | Kodi amuna/akazi anu analekeza pati ndi maphunziro | Pulayimale…….1<br>Sekondale……..2<br>Koleji…….3<br>Sanapiteko……4<br>N/A……..5 | |
| **A7** | Kodi mumagwira ntchito yanji | Yolipidwa pa mwezi ……[]<br>Ndimapanga bizinesi……[] | |

| | | | |
|---|---|---|---|
| | | Sindili pa ntchito…….[]<br>Zina (fotokozani)…….[] | |
| **A8** | Kodi mungafotokoze bwanji za mtundu wa banja lanuli | Banja losasakaniza ndi mawanja ena.....1<br>Banja losakaniza ndi mawanja ena……2 | |
| **A9** | Kodi muli ndi ana angati | Asapitilira asanu……1<br>Opitilira asanu……2 | |
| **A10** | Kodi m'nyumba mwanumu mumakhala anthu angati | Ochepera asanu……1<br>Oposera asanu ndi limodzi……..2 | |
| **A11** | Kodi mumasamalira anthu ena angati kupatula ana anu | Palibe…….1<br>1-3……..2<br>4-5……..3 | |
| **Gawo B: kuunika mitengo ndi maudindo zokhudza chuma chomwe chomwe chimagwiritsidwa ntchito pa ubereki m'Boma la Blantyre** | | | |
| **B1** | Kodi mukudziwa kuti amai amalipira kuchipatala pokabereka | Inde……1<br>Ayi……..2 | |
| **B2** | Ngati ndi inde, kodi ndi malo obadwitsira ati | Chipatala cha Boma……1<br>Chipatala cholipira……..2<br>Azamba……..3<br>Pa khomo……4 | |
| **B3** | Kodi mwana wanu womaliza anabadwira kuti?<br>**(Ngati anabadwira pa khomo pitani funso B7)** | ku Chipatala cha Boma …1<br>chipatala cholipira…….2<br>pa khomo…….3<br>kwa Azamba…….4<br>munjira popita ku chipatala….5<br>kwina (fotokozani)……..6 | |
| **B4** | Kodi pali mtunda wautali bwanji pakati pa chipatala chomwe munaberekerako | Pafupi kwambiri…….1 | |

| | | | |
|---|---|---|---|
| | mwana wanu womaliza ndi kunyumba kwanu | Mtunda wosaposera 10km…….2<br>Mtunda woposera 10km…….3 | |
| **B5** | Kodi munaberekera ku chipatala chomwe mumayendera sikelo ya mimba<br>(**ngati 'Inde' dumphani B6**) | Inde……..1<br>Ayi…….2 | |
| **B6** | Ngati ndi Ayi, fotokozani chifukwa simunakaberekere kumeneko | …….<br>……..<br>…… | |
| **Ngati funso B3 asankha pakhomo, kwa Azamba kapena munjira funsani (B7, B8 ndi B9)** | | | |
| **B7** | Kodi chinakupangitsani ndi chiyani kuti asabadwire ku chipatala | Kutalika kwa mtunda……..1<br>Kuchipatala amalipiritsa…..2<br>Ogwira ntchito kuchipatala amavuta….3<br>Zina (fotokozani)…….4 | |
| **B8** | Kodi munapita ku chipatala patatha nthawi yaitali bwanji mutabereka mwana wanu womaliza | Maola wosaposera 24……..1<br>Pakati pa maola 48-72…….2<br>Maola oposera 72…….3 | |
| **B9** | Kodi panapezeka Mabvuto kwa inu kapena mwana mutapita kuchipatala mutaberekera kunja kwa chipatala | Inde……..1<br>Ayi…….2 | |
| **B10** | kodi mumayenda bwanji popita kuchipatala | Wa pansi…….1<br>Kabaza…….2<br>Njinga yopalasa……..…..3<br>Njinga yamoto…….4<br>Matola…….5<br>Galimoto lathu……6<br>Zina (fotokozani)……7 | |
| **B11** | Kodi mumagwiritsa ntchito ndalama zingati pa | Yochepera MK1, 000.00……..1 | |

| | | | |
|---|---|---|---|
| | mayendedwe opita ndi kubwerera ku chipatala | MK1, 001-MK5, 000.00……2<br>Yoposera MK5, 000.00…….3 | |
| **B12** | Kodi munayendera sikelo kangati pa uchembere wanu womaliza | Kamodzi……..1<br>Kawiri……..2<br>Katatu……..3<br>Kanayi……...4<br>Kopitilira kanayi (fotokozani)……5 | |
| **Ngati B2 anayankha chipatala cholipira musafunse B13** | | | |
| **B13** | Kodi munafunsudwapo kulipira pa uchembere wanu womaliza ku chipatala cha Boma | Inde…….1<br>Ayi……2 | |
| **B14** | Kodi mwana wanu womaliza anabadwa mu njira yanji? | Anabadwa bwinobwino …….1<br>Anabadwa kudzera ku mpeni ……2 | |
| **B15** | Kodi ndi zinthu ziti zomwe munagula pokonzekera kubadwa kwa mwana wanu | **zinthu** **Mtengo**<br>1 Pepala la pulasitiki [ ] ……<br>2 Lumo [ ] ……<br>3 Zomangira mchombo [ ] ……<br>4 Zounikira [ ] ……<br>5 Baseni (2) [ ] ……<br>6 Nyanda [ ] ……..…<br>7 Zovala za mwana [ ] ……<br>8 Ziwiya za mwana [ ] ……..…<br>9 Sopo [ ] ……<br>10 Zitenje [ ] ……..…..<br>11 Zina (fotokozani) ……...…… | |
| **B16** | kodi munagwiritsa ntchito ndalama zingati pogula zinthu zokonzekera kubadwa kwa mwana wanu womaliza pa zomwe mwatchula funso | Wonkhetsani mitengo yonse mu **(B20)**<br>**MK**…… | |

| | | | |
|---|---|---|---|
| | **(B15)** | | |
| **B17** | Kodi munakhala masiku angati m'chipatala pokachira | Tsiku limodzi……[ ]<br>Masiku awiri……..[ ]<br>Masiku atatu……..[ ]<br>Masiku anayi…….[ ]<br>Masiku asanu…….[ ]<br>Kuposera masiku asanu…….[ ] | |
| **Gawo C: kufufuza kuthekera kolipira ubereki m'Mawanja** | | | |
| **C1** | Kodi nyumba mukukhalayi ndi yandani | Yathu (dumphani C2)……1<br>Yolipira(dumphani C3)…….2<br>Zina (fotokozani)……..3 | |
| **C2** | Ngati ndi ya renti, mumalipira ndalama zingati | Yosaposera MK9, 999.00……..…..1<br>MK10,000-20, 000……..2<br>MK20,001-40, 000……...……..3<br>MK40,001-50, 000…….4<br>Yoposera MK50,000.00…….5 | |
| **C3** | Ngati ndi yanu, mungailipiritse ndalama zingati | Yosaposera MK9, 999.00……..…..1<br>MK10,000-20, 000……..2<br>MK20,001-40, 000……...……..3<br>MK40,001-50, 000…….4<br>Yoposera MK50,000.00…….5 | |
| **C4** | Kodi mumagwiritsa ntchito mphamvu yanji pophikira | [ ]Makala……..1<br>[ ]Nkhuni……..2<br>[ ]Magetsi……..3<br>[ ]Genereta…….4<br>[ ]Magetsi a dzuwa……5<br>[]malasha……..5<br>(lolani mayankhom opitilira limodzi) | |

| | | | |
|---|---|---|---|
| **C5** | Kodi mumagwiritsa ntchito mphamvu yanji kuunikira m'nyumba mwanu | Kandulo……..1<br>Nyale……..2<br>Tochi……..3<br>Magetsi……4<br>Magetsi a genereta……..5<br>Magetsi a dzuwa…….6<br>(lolani mayankho opitilira limodzi) | |
| **C6** | Kodi mumagwiritsa ntchito ndalama zingati pa mwezi kuti muthe kuphikira ndi kuunikira | zosapitilira MK10,000.00…….1<br>MK10,000-20,000.00……...2<br>Yoposera MK20,000.00……...3 | |
| **C7** | Kodi patsiku mumadya zakudya kangati | Kamodzi……1<br>Kawiri…….2<br>Katatu……..3<br>Kanayi……4 | |
| **C8** | Kodi mumadya nsomba kapena nyama yochuluka bwanji pa mwezi | Yosapitilira 5kgs……..1<br>Yoposera 5kgs…….2 | |
| **C9** | Kodi muli ndi ana angati omwe ali pa sukulu | Sukulu ya nkomba phala……1<br>Pulaimale……..2<br>Sekondale……3<br>Sukulu ya ukachenjede……4 | |
| **C10** | Kodi mulipira ndalama zingati polipira sukulu za ana anu pa chaka | **sukulu Mtengo(MK)**<br>Sukulu ya nkomba phala……<br>Pulaimale……..<br>Sekondale…….<br>Sukulu ya ukachenjede…… | |
| **C11** | Kodi muli ndi zinthu izi | Malo a malonda [ ]<br>Galimoto [ ] | |

| | | | |
|---|---|---|---|
| | | Wailesi ya kanema [ ]<br>Wailesi [ ]<br>Njinga ya moto [ ]<br>Bizinesi [ ]<br>Munda [ ]<br>Zina (fotokozani)<br>(lolani mayankho opitilira limodzi) | |
| **C12** | Kodi muli ndi akaunti komwe mumasungako ndalama | Inde……1<br>Ayi……...2 | |
| **C13** | Kodi muli ndi akaunti ku banki ina iliyonse ya m'mudzi | Inde……1<br>Ayi……...2 | |
| **C14** | Kodi pali anthu ena a padera amene amakuthandizani pa za chuma m'banja lanu | Inde……1<br>Ayi……...2 | |
| **C15** | Kodi munagulitsapo katundu wanu kuti mupeze ndalama zolipilira ku chipatala | Inde……1<br>Ayi……...2 | |
| **C16** | Kodi munabwerekapo ndalama kuti mukalipire ku chipatala | Inde……1<br>Ayi **(Ngati Ayi, dumphani C17)**…...2 | |
| **C17** | kodi munalipira chiongola dzanja pa ndalama yomwe munabwereka kuti mukalipire ku chipatala | Inde……1<br>Ayi……...2 | |
| **C18** | Kodi munayamba mwachepetsa zakudya zina mwa zomwe mumakonda kudya kuti mukwanitse kulipira ku chipatala | Inde……1<br>Ayi……...2 | |
| **C19** | Kodi zinayamba zachitikapo kuti mwana wa m'nyumba mwanu aleke sukulu ndi cholinga chofuna kupeza ndalama zokalipira ku chipatala | Inde……1<br>Ayi……...2 | |

| | | | |
|---|---|---|---|
| **C20** | Kodi inu mumadalira abale kapena abwenzi anu pa zolipira za kuchipatala | Inde…….1<br>Ayi…**(Ngati Ayi, dumphani C21)**…..2 | |
| **C21** | Ngati alipo omwe amakuthandizani, fotokozani ndi ndani anu | Abale a ku mtundu……..1<br>Abwenzi a ku tchalitchi…….2<br>Anzathu ogwira nao ntchito……..3<br>Anzathu wamba……4<br>Ena (fotokozani)……5 | |
| **C22** | Kodi mumagwiritsa ndalama zingati potumikira zofunika za pa banja lanu zonse pamodzi pa mwezi | ≤MK10,000.00…….1<br>MK10,001.00 - MK50,000.00…..2<br>MK50,001- MK100,000.00……..3<br>Zoposera MK100,000.00…….4 | |
| **Gawo D: kufufuza njira zomwe zimagwiritsidwa ntchito ndi mawanja polipira ubereki m'Boma la Blantyre**<br>Anthu ambiri m'dera lino amalandira thandizo la ubereki ku zipatala zomwe zili kutali pafupifupi mtunda oposera 5km | | | |
| **D1** | Kodi inu munayamba mwalipirapo kuchipatala ndalama ya mthumba mwanu pa nthawi ya ubereki | Inde…….1<br>Ayi……...2 | |
| **D2** | Kodi muli ndi ndondomeko ina iliyonse yomwe mumasungila ndalama zothandizira kulipira ku chipatala | Inde…….1<br>Ayi……...2 | |
| **D3** | Ngati Inde, kodi ndondomeko yake ndi iti | MASM……1<br>UNIMED……..2<br>Liberty……..3<br>Metropolitan…….4<br>Zina (fotokozani)…….5 | |
| **Gawo E: kupeza njira zomwe mawanja amagwiritsa ntchito polipira za ubereki** | | | |

| | | | |
|---|---|---|---|
| **E1** | Kodi mungathe kulowa nao mu gulu lothandiza kulipira kuchipatala litapezeka m'dera lanu | Inde……1<br>Ayi(**dumphani E5**)..…...2 | |
| **E2** | Ngati **Inde**, kodi mungakwanitse kulipira ndalama zingati pamwezi | Longosolani…… | |
| **E3** | Ngati **Ayi** (**E2),** ndi zifukwa ziti zomwe zingakulepheretseni kutero | ……<br>……<br>……. | |
| **E4** | Kodi ndi njira iti yomwe mungakonde kuti izikulipilirani ku chipatala | Kutulutsa ndalama ya mnthunba nthawi zonse……..1<br>inshuransi……2<br>Banki nkhonde……3<br>Mabungwe osungitsa ndalama….4<br>Ndondomenko yosungira ndalama za ubereki ku Banki……..5<br>Zina (fotokozani)…….6 | |

**ZIKOMO KAMBA KOTENGA NAWO MBALI MU KAFUKUFUKU!!!!**

**Appendix C: Information Letter**

**Study Title: Investigating Household health expenditures during birth period in Blantyre District, Malawi**

**Investigators:** Annie Lisa Majamanda Kambale (Kamuzu College of Nursing), Mr. Gibson Masache (Kamuzu College of Nursing) and Dr Abigail Kazembe (Kamuzu College of Nursing). **Contact details of study Principal Investigator:** Annie Lisa MajamandaKambale**,** Kamuzu College of Nursing, P.O Box 415, Blantyre. Cell: 0884173379. Email: majamanda2016lisa@kcn.unima.mw. **Study Sponsor**: United States Agency International Development (USAID), World Learning Malawi Scholarship Programme, P.O Box 30733, Lilongwe

Dear participant,

My name is Annielisa M Kambale, a Master of Science in Reproductive Health student at Kamuzu College of Nursing. I am conducting a study entitled Investigating Household health expenditures during birth period in Blantyre District, Malawi in partial fulfillment to the award of the degree. The purpose of this study is to investigate Health expenditures which are borne by households during births. Results of this study shall establish effects of health expenditures on utilisation of reproductive health services by households and effective strategies to reduce impoverishment. You are asked to give an audience with the interviewer for approximately 30 minutes. Please note that participation in the study is voluntary and no direct benefits in cash or kind are attached. Your participation in the study will not affect any eligibility to health and social services rendered in your community hence there are no risks associated with your participation in this study. You are not required to provide your name as you participate so that your identity is confidential. You also have the liberty to withdraw at

any point in the study. You are therefore asked to give informed consent by signing or thumb print on a sheet provided to indicate your voluntary participation.

If you need further information do not hesitate to contact the following: COMREC Secretariat, P/B 360, Chichiri; Mr G Masache, Kamuzu College of Nursing, P/Bag 1, Lilongwe; Dr A Kazembe, Kamuzu College of Nursing, P/Bag 1, Lilongwe; Annielisa Majamanda Kambale on 0884173379

Thank you.

**Appendix D: Consent form to Households**

**Study Title: Investigating Household health expenditures during birth period in Blantyre District, Malawi**

**Investigators:** Annie Lisa Majamanda Kambale (Kamuzu College of Nursing), Mr. Gibson Masache (Kamuzu College of Nursing) and Dr Abigail Kazembe (Kamuzu College of Nursing). **Contact details of study Principal Investigator:** Annie Lisa Majamanda Kambale**,** Kamuzu College of Nursing, P.O Box 415, Blantyre. Cell: 0884173379. Email: majamanda2016lisa@kcn.unima.mw. **Study Sponsor**: United States Agency International Development (USAID), World Learning Malawi Scholarship Programme, P.O Box 30733, Lilongwe

I hereby give full consent to participation in this vital study upon getting all necessary information pertaining to my involvement by reading or having someone read the letter to me. I do understand the aim and procedures of this study. I can withdraw at any point of the study without been negatively appraised and will not coerced in any way.

The findings can be disseminated to benefit the programming of reproductive health policies. I hence do not have direct benefits in participating in the study

I take conscious responsibility for all information I shall give in this study. I therefore give my consent voluntarily by signing/ thumb print.

Participant signature…….Date…….

Interviewer signature ..…….Date……..

**Appendix E: Information letter translated into Chichewa**

**Mutu wa kafukufuku: kuunika chuma chogwiritsidwa ntchito pa Ubereki Zochitika m'Boma la Blantyre, M'Malawi**

**Opangitsa kafukufuku:** Annie Lisa Majamanda Kambale (Kamuzu College of Nursing), Mr. Gibson Masache (Kamuzu College of Nursing) and Dr Abigail Kazembe (Kamuzu College of Nursing). **Mwini wa kafukufuku:** Annie Lisa MajamandaKambale**,** Kamuzu College of Nursing, P.O Box 415, Blantyre. Cell: 0884173379. Email: majamanda2016lisa@kcn.unima.mw. **Opereka thandizo la kafukufuku** : United States Agency International Development (USAID), World Learning Malawi Scholarship Programme, P.O Box 30733, Lilongwe

Wokondedwa wotenga nawo mbali,

Dzina langa ndi Annie Lisa MajamandaKambale**,** wophunzira wa pa sukulu ya ukachenjede yotchedwa Kamuzu College of Nursing. Mbali imodzi pazofunika pa maphunzirowa ndi kuchita kafukufuku yemwe mutu wake ndi "**kuunika chuma chogwiritsidwa ntchito pa Ubereki Zochitika m'Boma la Blantyre, M'Malawi".** Cholinga cha kafukufukuyu ndi kuunika chuma chomwe mawanja amagwiritsa ntchito pa ubereki. Zotsatira za kafukufuku zizathandidza akadaulo pa za ubereki ndi onse okhudzidwa popereka thandizo la za ubereki m'Boma la Blantyre kupeza njira zovomelezeka ndi zodalirika ku mawanja kupeza thandizo loyenera pa ubereki ku zipatala zomwe sizingapititse umphawi patsogolo mmawanja.

Chonde dziwani kuti kutenga nawo mbali ndikosakakamidzidwa ndipo simulandira mphotho ya mtundu uliwonse kamba kotenga nawo mbali. Kusatenga nawo mbali sikukhudza kuyenera kwanu kulandira thandizo la za umoyo ndinso zina zochitika m'dera lanu. Choncho palibe chiopsezo chinanchili chonse chomwe chingadze kamba kotenga nawo mbali.

Dziwani kuti simukuyenera kutchula dzina lanu pofuna kusunga chinsinsi cha mbiri yanu ya ubereki. Muli ndi ufulu wosiya kutenga nawo mbali nthawi ina iliyonse popanda chilango cha mtundu wina uliwonse.

Mufunsidwa mafunso kwa phindi zosaposera makumi atatu. Ngati mukufuna kudziwa zambiri funsani polembera kalata kapena kuimba lamya ku keyala zosatirazi

COMREC Secretariat, P/B 360, Chichiri; Mr G Masache, Kamuzu College of Nursing, P/Bag 1, Lilongwe; Dr A Kazembe, Kamuzu College of Nursing, P/Bag 1, Lilongwe;

Annielisa Majamanda Kambale on 0884173379.

Choncho muli kufunsidwa kuvomereza posaina pa tsamba lotsatira.

Zikomo.

**Appendix F: Consent form translated to Chichewa**

**Mutu wa kafukufuku: kuunika chuma chogwiritsidwa ntchito pa Ubereki: Zochitika m'Boma la Blantyre, M'Malawi:**

**Opangitsa kafukufuku:** Annie Lisa Majamanda Kambale (Kamuzu College of Nursing), Mr. Gibson Masache (Kamuzu College of Nursing) and Dr Abigail Kazembe (Kamuzu College of Nursing). **Mwini wa kafukufuku:** Annie Lisa MajamandaKambale**,** Kamuzu College of Nursing, P.O Box 415, Blantyre. Cell: 0884173379. Email: majamanda2016lisa@kcn.unima.mw. **Opereka thandizo la kafukufuku** : United States Agency International Development (USAID), World Learning Malawi Scholarship Programme, P.O Box 30733, Lilongwe

Ndikuvomereza kutenga nawo mbali mu kafukufuku nditawerenga/kuwerengeredwa bwino lomwe uthenga wokhudza kutenga nawo mbali. Ndamvetsetsa cholinga cha kafukufuku ndi dongosolo lake lonse.

Ndingathe kuleka kutenga nawo mbali nthawi ina iliyonse popanda vuto kapena kuumirizidwa kwa mtundu wina uli wonse. Zotsatira za kafukufuku zizathandiza kukhanzikitsa njira zoyenera kupereka ndi kupeza thandizo la ubereki popanda kusaukitsa mmawanja.

Palibe mphontho yomwe ndingalandile potenga nawo mbali m'kafukufuku. Mayankho onse ndingapereke nthawi zonse ndi oona. Choncho ndikuvomereza kutenga nawo mbali posaina.

Saini ya wotenga nawo mbal…… Tsiku…….

Saini ya wofunsa mafunso…… Tsiku…….

**Appendix G: Letter asking for permission**

Kamuzu College of Nursing

P.O Box 415

Blantyre

Cell: 0884173379

Email:majamanda2016lisa@kcn.unima.mw

March 15, 2017

The Chairperson

College of Medicine Research and Ethics Committee

Private Bag 360

Chichiri

Blantyre 3

Dear Sir/Madam

**REQUEST FOR APPROVAL TO CONDUCT A RESEARCH STUDY**

I am a student at Kamuzu College of Nursing pursuing a Master of Science Degree in Reproductive Health majoring in Health Policy, Planning & Financing. I write to request for your approval to conduct a research study titled "**Investigating Household health expenditures during birth period in Blantyre District, Malawi".** This study is a requirement in partial fulfillment for the award of the Master's Degree.

Your favourable consideration is highly appreciated.

Annie Lisa Majamanda Kambale

**Appendix H: Request for Permission to Conduct a Research Study**

Kamuzu College of Nursing

P.O Box 415

Blantyre

March 15, 2017

The District Health Officer

Blantyre District Health Office

P/Bag 66

Blantyre

Dear Sir/Madam,

**REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY IN MANASE CATCHMENT AREA**

I am a second year student from Kamuzu college of Nursing of the University of Malawi pursing a Master of Science degree in Reproductive Health (Health Policy, Planning and Financing). In partial fulfillment to the award of the degree I am required to conduct a research study. The study title is **Investigating Household health expenditures during birth period in Blantyre District, Malawi**

The purpose of this study is to investigate Health expenditures which are borne by households during the time they seek reproductive services from public health facilities throughout the period of child birth. Results of this study shall establish effects of health expenditures on utilisation of reproductive health services by households and effective strategies to reduce impoverishment**.**

Participants to the study are households with women of reproductive age in Manase catchment area. The study is proposed to take about four weeks from 1st June, 2017.

Your favourable consideration shall be greatly appreciated.

Yours faithfully,

Annielisa Kambale- BScN/UCM

**Appendix I: Permission to Conduct a Pilot Study**

Kamuzu College of Nursing

P.O Box 415

Blantyre

March 15, 2017

The District Health Officer

Blantyre District Health Office

P/Bag 66

Blantyre

Dear Sir/Madam,

**REQUEST FOR PERMISSION TO CONDUCT A PILOT STUDY IN NANCHOLI CATCHMENT AREA**

I am a second year student from Kamuzu college of Nursing of the University of Malawi pursing a Master of Science degree in Reproductive Health (Health Policy, Planning and Financing). In partial fulfilment to the award of the degree I am required to conduct a research study. The study title is **Investigating Household health expenditures during birth period in Blantyre District, Malawi**

The purpose of this study is to investigate Health expenditures which are borne by households during the time they seek reproductive services from public health facilities throughout the period of child birth. Results of this study shall establish effects of health expenditures on utilisation of reproductive health services by households and effective strategies to reduce impoverishment. I would like to conduct a pilot study in five households in Nancholi catchment area. Results of the pilot study shall be used to modify the data collection tool before actual data collection. Participants to the study are households with

women of reproductive age in the catchment area. The study is proposed to take about four weeks from 1st June, 2017.

Your favourable consideration shall be greatly appreciated.

Yours faithfully,

Annielisa Kambale- BScN/UCM

## Appendix J: Approval letter from Blantyre DHO

Telephone: Blantyre 01875332 / 01877401
Fax: 01872551/01 878 539

Communication should be addressed to:

The District Health Officer


In reply please quote No. .....

MINISTRY OF HEALTH AND POPULATION
DISTRICT HEALTH OFFICE
P/BAG 66
BLANTYRE
MALAWI

**REF. NO.BTDHO/MED/9** 13th April, 2017

*Annielisa Kambale*

College of Medicine
Private Bag 360
**BLANTYRE**

Dear Madam,

**PERMISSION TO CONDUCT STUDY.**

I am pleased to inform you that permission has been granted for you to conduct your study entitled:- ***"Investigating Health Expenditures during births in Malawi the case of Blantyre District"*** at Nancholi and Manase Catchment area. However, this is subject to approval by College of Medicine Research Ethics Committee (COMREC).

Please note that management encourages our participation in the study for ownership and use of findings.

Yours faithfully

Dr. Medson Matchaya
**DISTRICT HEALTH OFFICER**

## Appendix K: Approval Certificate from COMREC

UNIVERSITY OF MALAWI

# CERTIFICATE OF ETHICS APPROVAL

This is to certify that the College of Medicine Research and Ethics Committee (COMREC) has reviewed and approved a study entitled:

**P.04/17/2171** – Investigating health expenditures during births in Malawi – The case of Blantyre District by Annie Lisa Majamanda Kambale

*On 10th May 2017*

*As you proceed with the implementation of your study, we would like you to adhere to international ethical guidelines, national guidelines and all requirements by COMREC as indicated on the next page*

Dr. L. Alfazema- Vice-Chairperson (COMREC)

Approved by College of Medicine
10 MAY 2017
(COMREC) Research and Ethics Committee

10th May 2017
Date