University of Malawi

Kamuzu College of Nursing

A RESEARCH PROPOSAL ON "IMPROVING PARTINER NOTIFICATION IN SEXUALLY TRANSMITTED INFECTION TREATMENT AT KAMUZU CENTRAL HOSPITAL" SUBMITTED TO THE FACULTY OF NURSING IN PARTIAL FULFILLMENT OF A BACHEROR OF SCIENCE IN NURSING AND MIDWIFERY

BY

CHARLES JENYA SOKO

SUPERVISED BY

MR. M. NGWALE

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DECLARATION

I **CHARLES JENYA SOKO** hereby declare that this proposal is a result of my own work in originality and execution. It has never been presented by anyone for any degree and it is not currently being submitted for any degree elsewhere.

INVESTIGATORS SIGNATURE.....DATE 9/11/12

SUPERVISORS SIGNATURE.....DATE 26/11/12

DEDICATION

This research proposal is entirely dedicated to the following: my Mum Agnes Jenya, Miss Chisomo Petross, my sister Esther and my brothers Herbert, Daniel, Andrew, Julius, Precious and Chipiliro. Thank you all for your encouragement and support, without your prayers I wouldn't reach this far. I love you all.

ACKNOWLEDGEMENTS

No any undertaking is accomplished alone; without the grace of the almighty Lord, this wouldn't be a reality, thank you GOD for the free gift of life and wisdom, "glory be to your name".

There are also people who contributed directly and those who contributed indirectly to the success of this research proposal, I acknowledge with deep appreciation and my warmest thanks the help and support of the following people:

My supervisor, **Mr. M. Ngwale**, your guidance and support has been instrumental to the completion of this proposal. May God richly bless you.

My mum Agnes Jenya and my brothers: Herbert, Daniel, Andrew, Julius, Precious and Chipiliro, you have been a wonderful people. Thank you for your support and encouragement. God be with you always.

Miss. Chisomo Petross, thank you for your encouragement and all your input, it has not been so easy but you kept on encouraging me. You are a perfect gift ever happened to me. God bless you in everything.

My fellow year four students, you have been so supportive to me, I don't take this for granted. God will reward you for this.

ABBREVIATIONS

AIDS	: Acquired Immuno-deficiency syndrome
CHAM	: Christian Health Association of Malawi
GoM	: Government of Malawi
GDP	: Gross Domestic Production
HIV	: Human Immuno-deficiency Virus
KCH	: Kamuzu Central Hospital
KCN	: Kamuzu College of Nursing
MoH	: Ministry of Health
MoLG	: Ministry of Local Government
MDG	: Millennium Development Goal
NSO	: National Statistics Office
PSI	: Population International Services
STI/STD	: Sexually Transmitted Infection/ Sexually Transmitted Disease
WHO	: World Health Organisation

1.0 CHAPTER ONE

1.1 Introduction and Background Information

Malawi is sub-Saharan African country located south of the equator. It is bordered to the north and northeast by the United Republic of Tanzania; to the east, south, and southwest by the People's Republic of Mozambique; and to the west and northwest by the Republic of Zambia. Malawi's economy is primarily based on agriculture which accounts for 30% of the gross domestic production (GDP). In 2008, Malawi's population was estimated at 13.1 million with an increase of 2.8% per year and a population density of 139 persons per square kilometer, (NSO, 2010).

Malawi's health indicators are among the worst in the world. Life expectancy at birth stood at 44 and 51 years for males and females, respectively, in 2010 (WHO, 2010). The under-five mortality rate is estimated at 112 per 1000 live births. The maternal mortality rate is estimated at 675 per 100,000 live births (NSO, 2010). Statistics indicate that 70% of mortality among inpatients is due to communicable and other preventable diseases. Fatalities among the under-fives are mostly due to malnutrition, anaemia, pneumonia and diarrhoeal diseases. Maternal mortality rates are pushed up by poor access to essential obstetric services and the poor quality of these services. AIDS is now the leading cause of death in the most productive age group (15–49 years) and AIDS-related illnesses account for over 70% of all inpatient admissions (WHO, 2010).

Nearly all health care services in Malawi are provided by three main agencies. The Ministry of Health (MoH) provides about 60%; the Christian Health Association of Malawi (CHAM) provides 37% and the Ministry of Local Government (MoLG) provides 1%. There is a small private-for-profit health sector limited to the urban areas as well as health services provided by private companies, private practitioners, commercial companies, the Army and the Police. There are three levels in the health system i.e. primary level comprising of health centres, health posts, dispensaries, and rural hospitals; secondary level made up of district and CHAM hospitals; the tertiary level consisting of the central hospitals and one private hospital with specialist services, (MoH, 2005).

According to the Ministry of Health, the total number of physicians in the country is 219, being one doctor per 45,662 Malawians, well below the WHO average ratio of 1 to 10,000. For Malawi to reach this ratio, 800 additional doctors are required. The MoH has 108 general practitioners

and specialists, while CHAM, the College of Medicine and the private sector have 34, 21 and 56 medical officers respectively. Skilled positions such as surgeons have vacancy rates as high as 85%. There are currently no pathologists in the public sector in the country and only 17 surgeons and 11 obstetricians. Ten districts are without a public sector doctor and four without a doctor at all. The College of Medicine produces about 20 doctors per year. Considering its population, this figure is extremely low and this has resulted in heavy reliance on other categories of health professionals such as clinical officers and nurses to carry out some of the work for doctors.

There is a critical nursing shortage in Malawi with a population ratio 1 to 3500, compared with 1 to 1000 for Africa as a whole; nursing to patient ratios range from 1:50 – 1:120 with the majority of staff being lowly skilled workers. Up to 65% of the public sector nursing posts are unfilled and six districts have a nursing vacancy rate of over 70%. Over half of 29 districts have less than 1.5 nurses per facility, and five districts have less than one. Over 95% of registered nurses are urban based leaving significantly higher vacancy rates in under-served rural areas, (PSI, 2009).

Sexually transmitted infections (STI's) refer to a number of distinct infections caused by a variety of organisms, including bacteria, viruses, protozoa and ectoparasites, which are typically transmitted through sexual contact and results in an array of clinical manifestations, (Cecil et al 2009). The clinical syndromes associated with the infection by one or more of these organisms can range from asymptomatic infection to severe life threatening disease. The acquisition and transmission of sexually transmitted infections depend primarily on sexual behavior but some infections such as hepatitis B and cytomegalovirus can also be acquired through non sexual contact in areas with poor living conditions. Some can be transmitted from mother to child during pregnancy and child birth and can be associated with significant infant morbidity and mortality. Others including syphilis and human immunodeficiency virus (HIV) can be transmitted through blood products and organ transplantation, (Low et al 2006)

The World Health Organization (WHO) estimates that approximately 340 million new cases of the four main curable STIs (gonorrhoea, chlamydial infection, syphilis, and trichomoniasis) occur every year, 75–85% of them in developing countries. STIs impose an enormous burden of morbidity and mortality in developing countries, both directly through their impact on reproductive and child health, and indirectly through their role in facilitating the sexual transmission of HIV infection. The high prevalence of STIs has contributed to the

disproportionately high HIV incidence and prevalence in Africa. Conversely, HIV may have contributed to some extent to STI increases, especially of viral agents such as herpes simplex virus (responsible for genital herpes) or human papilloma viruses (some strains being responsible for genital warts, others for cervical, anal, or penile cancers). The greatest impact is on women and infants. The World Bank has estimated that STIs, excluding HIV, are the second commonest cause of healthy life years lost by women in the 15–44 age group in Africa, responsible for some 17% of the total burden of disease, (Mayaud & Mabey 2004).

In Malawi, the prevalence of STI's other than HIV is high and the resultant drain on the limited health resources is substantial. The national prevalence among antenatal women for syphilis seroprevalence is estimated at 2-10%. In 1990, 42% of antenatal clinic attendees were diagnosed with at least one STI infection (Zachrial et al, 2003). According to Muula (2006), annually, 3.4% of the sexually active population which is estimated at 6, 047 173 people attends health facilities because of STI's. Data from the Ministry of Health indicate that STI's are the most common reason for outpatient visits to medical facilities. In addition to the large numbers who have symptoms, a great many more people are not even aware that they have an STI since they have no symptoms or are not aware of the symptoms.

1.2 Problem Statement

STI's constitute a huge health and economic burden for developing countries: 75–85% of the estimated 340 million annual new cases occur in these countries, and STIs account for 17% economic losses because of ill health. They remain one of the major causes for outpatient visitation in medical facilities, (MoH, 2008). In view of this, the Government of Malawi (GoM) through the ministry of health has been implementing strategies to ensure early diagnosis and treatment of STI's in which one of the strategies is partner notification. This strategy, is aimed at reviewing with the client the possibilities for dialogue with their sexual partner so that there can be an increase in the likelihood of treatment of the partner and establish the most relevant methods of safer sex together. It includes identifying sex partners, informing them of their exposure, ensuring evaluation or treatment, and providing advice on preventing further infections. Despite the introduction of this strategy, there are a lot of recurrent infections being reported at the hospital. These recurrent infections suggest a deficiency in partner notification as a strategy for reducing the prevalence of STI's. This study aims at improving partner notification

in STI treatment by having a deeper understanding of patient's knowledge, attitudes, and practices on partner notification.

1.3 Significance of the study

The findings of this study will help to reduce the prevalence of recurrent STI's in clients by improving partner notification through identifying and addressing the challenges that clients face when they have been advised to notify their partners. It is also intended to assess clients' level of knowledge which is also crucial as it determines whether the client notifies the partner or not. This is in line with the millennium development goal (MDG) number six which is to combat HIV/AIDS, Malaria and other diseases.

1.4 Objectives of the study

1.4.1 Broad

To improve partner notification in STI treatment by having a deeper understanding of client's knowledge, attitudes and practices on partner notification.

1.4.2 Specific

Specifically, the study seeks:

1. To assess the clients knowledge on (i) sexually transmitted infections (STI's)
   (ii) Importance of partner notification
   (iii) Different approaches to partner notification
2. To assess the health seeking behaviors of STI clients
3. To assess the challenges that clients face when they have been advised to notify their partners
4. To determine the type of partners that client's with multiple sexual partners mostly notify, i.e. between primary and secondary partners

2.0 CHAPTER TWO

2.1 Literature Review

2.1.1 Studies done on client's knowledge on sexually transmitted infections, importance of partner notification in STI treatment and different approaches to partner notification

Crack et al (2002) did a study, the goal of the study was to assess the basic knowledge about STI's and their prevalence, to determine correlates of high STI knowledge levels and explore whether self-perceptions of STD knowledge correlated with knowledge test scores. A convenient sample of adolescents from waiting areas in urban children's hospitals was asked by peer educators about their STD education, the sources of their education and their perception of the STD knowledge. They then were given a short assessment testing their knowledge.

The study found that out of the 393 surveys collected from the adolescent's aged12 to 21 years, 97% self-reported having been educated about STDs, and the reported major sources were school (70%), parents (52%), and friends (31%). Only 7 (2%) correctly named all 8 major STDs, 35 (9%) named the 4 curable STDs, and 13 (3%) named the 4 incurable STDs. HIV was the mostly commonly named of the 8 major STDs. According to the study, adolescent's knowledge about non HIV- STD's is cursory.

The findings of this study cannot be generalized and may not give a true reflection of the knowledge level in Malawi's adolescents as it was done in the United States of America which has a curricula different from Malawi's and teaches different things at different levels and also, the cultures are different which has an effect on the information parents share with their children. The study also focused on adolescents only hence a need for a study to give a reflection of the knowledge levels in Malawian setting and also to incorporate other age groups other than adolescents only.

Williams et al. (2003) did a study "changing patterns of knowledge, reported behavior and sexual transmitted infection in South Africa's gold mine community. The study was aimed at investigating the prevalence of STI's before and after the start of an HIV prevention program.

The study involved cross sectional surveys carried around 1998 and 2000 among mine workers, sex workers and adults in the community. It was found that in 1998, the prevalence of HIV among men and women in the general population, mineworkers, and sex workers was 20%, 37%, 29% and 69% respectively. In 2000, syphilis, gonorrhea, and Chlamydia had increased among men and women and syphilis had increased among women. According to the study, there was evidence of positive behavior change but this was not substantial or universal and also that the knowledge on HIV/AIDS and awareness of the epidemic were high but condom use remained low.

The study relates to my study on knowledge of clients on STI's as this study assessed knowledge of people and relates it to behavior as in regard to HIV/AIDS, and sexually transmitted infections before and after the implementation of an HIV prevention program. In my study, I would like to assess client's knowledge and also relate it to the behavior of clients in partner notification as part of STI treatment. The study done by Williams et al (2003) concentrated much on knowledge on HIV other than other sexually transmitted infection and also it was done in a mining community which is different from our setting as it is composed of people from different walks of life brought together because of job opportunities therefore the need for a study to assess knowledge on other STI's other than HIV and also in a neutral community.

Another study on knowledge was done by Temin et al (1999). The study was aimed at exploring the adolescent's perceptions of sexual behavior among their peers, their knowledge of STD's and their preferred means of preventing and treating STD's.

Twenty four single-sex focused group discussions were conducted among the young people aged 15-20 attending school in Benin City. The study found that young people had knowledge about STI's especially HIV and AIDS but many believed infections were inevitable. It was also found that when these young people have an STI, most went to traditional healers than seeking treatment from the doctor.

This study relates to my study as it assessed knowledge in the youth on STI's in which it was found that young people had the knowledge. There is also a need for a study in our country as the findings from Benin city cannot give a reflection of Malawi as the sources of information on STI's are not the same and we cannot conclude that the youth in Malawi have knowledge on STI's.

A study by Crack et al (2007) was done to determine the prevalence of partner notification and subsequent health seeking behavior in high risk population in Lima Peru. In the study, STI infected participants of an HIV/AIDS prevention trial completed a questionnaire concerning partner notification. In the study, out of the 502 STD positive, 287 completed the survey. Among the participants, 65% informed their primary partner and 10.5% informed casual or anonymous partners. Reasons for failure to notify varied by partner type and included not understanding the importance of partner notification, embarrassment, fear of rejection, and inability to locate the partner.

This study among other things assessed client's knowledge on the importance of partner notification, which also determines whether the client notifies the partner or does not. The study found that lack of knowledge on the importance of partner notification was cited as one of the reasons hindering clients from notifying their sexual partners. There is a need to determine if also lack of knowledge on the importance of partner notification is a barrier in Malawi. The results of the study done in Peru cannot be generalized as the two countries differ in the levels of people's awareness about STI treatment as they use different approaches.

2.1.2 Studies done on health seeking behaviors in STI, clients

Zachariah et al. (2002) did a study aimed at describing health seeking and sexual behavior including condom use among patients presenting with STI's and to identify socio-demographic and behavioural risk factors associated with "no condom use" during the symptomatic period.

It was a cross sectional study of consecutive new STI cases diagnosed with STI's at an STI clinic. The clients were interviewed by STI counselors after obtaining consent.

Out of 498 new STI clients, 53% had taken some form of medication before coming to the STI clinic, the most frequent alternative source being the traditional healer (37%). 46% of all clients reported sex during the symptomatic period (median 14 days), the majority (74%) not using condoms. 90% of all those who had not used condoms resided in villages and had seen only the traditional healer.

The study found that most clients (53%) had taken some form of medication before going to the hospital for STI treatment which increases the time a client lives with the infection before receiving proper treatment and this can increase the spread of the infection as the client stays long with the infection however the study was not done at nation level and was only done in

Thyolo district hence the need to also identify the health seeking behaviors of STI patients in other parts of Malawi.

Another study was done by Malta et al (2007). The study sought to qualitatively explore STI clinic experiences among individuals diagnosed with STIs via public clinics in Rio de Janeiro, Brazil. It focused on eliciting the perspective of clinic users with regard to those factors influencing their STI care-seeking decisions and the health education and counseling which they received during their clinic visit.

Thirty semi-structured interviews were conducted with heterosexual men and women and men who have sex with men presenting with STIs at two public clinics.

The Salient themes that emerged from participant narratives included the importance of low STI-related knowledge and high perceived stigma, both STI-related and other types of social stigma, on STI care-seeking delays. Interview findings also suggest that such barriers to care seeking are not adequately addressed through ongoing health education and counseling efforts at public STI clinics and in turn critical opportunities for STI/HIV prevention are currently being missed.

The study found that there were delays in seeking STI treatment which was attributed to low STI knowledge and perceived stigma. The findings of this study are not universally applicable as Brazil and Malawi are two different countries with populations with different knowledge levels on STI and also with different cultures which can affect stigmatization of STI clients hence the need to assess the health seeking behaviors of STI clients in Malawi.

Another study on health seeking behaviors in STI patients was done by Fonck (2001) the aim was to generate data for improved STD prevention and care, and to assess sexual behavior and relevant health-seeking behavior.

A questionnaire to elicit social, demographic, healthcare-seeking, and sexual behavior information was administered to 471patients attending the referral clinic for STDs in Nairobi, Kenya.

A large proportion of the patients had sought treatment in public and private sectors before attending the clinic for STDs. Women waited longer than men to seek medical care. In addition, women more than men engaged in sex while symptomatic, mostly with their regular partner.

Condoms were used rarely during illness. In their self-reports, 68% of the men admitted to having extramarital affairs, and 30% to paying for sex, yet they blamed their wives for their STDs.

According the study, STI patients sought treatment from public and private sectors before attending STI clinic; this shows that there is a delay in receiving treatment in STI patients, however these results cannot give a true reflection health seeking behaviors of Malawian patients as the study was done in another country with different social economic factors to Malawi's highlighting the need for a study in Malawi to determine the health seeking behaviors.

2.1.3 Studies done on challenges faced by clients when they have been advised to notify their partners

Hongjie et al (2003) did a study in China; the goal of the study was to explore the effect of perceived stigmatization on control of STDs. It was a cross-sectional study which was conducted among males attending four STD clinics for the first time for a current STD.

Among 406 patients, 80% felt stigmatized, 28% sought treatment only after suffering symptoms for at least 1 week, and 40% reported continuing to have sex while having symptoms. No association was observed between feelings of stigmatization and delay in seeking treatment. Among those married, 77% expressed unwillingness to notify their spouses. Patients who felt stigmatized were less likely to agree to notify their spouses (odds ratio, 0.42; 95% CI, 0.21-0.85).

According to the study, 80% of the participants felt stigmatized and these patients were less likely to agree to notify their spouses. Stigma was the challenge that clients faced and were less likely to notify their partners about their STI diagnosis. The findings of this study cannot conclude that stigma is also a challenge that patients in Malawi face as this study was done in China which has different social-cultural setting and there is a need to assess the challenges that people in Malawi face and if stigma is one of the challenges, what percentage is affected.

In a study by Crack et al (2007), cited above, a part from assessing the knowledge of clients on partner notification, the challenges that clients face in partner notification were also assessed. In the study, out of the 502 STD positive, 287 completed the survey. Among the participants, 65% informed their primary partner and 10.5% informed casual or anonymous partners. Reasons for

failure to notify varied by partner type and included not understanding the importance of partner notification, embarrassment, fear of rejection, and inability to locate the partner.

This study relate to my study's objective to assess the challenges that clients face in partner notification as also in this study, the challenges that people in Peru face were assessed however the findings cannot be generalized as a sample studied in Peru cannot give a true reflection of Malawi's population.

Another study to assess the challenges faced by clients in partner notification was done by Alam et al. (2010). In the study, the feasibility and acceptability of partner notification (PN) for sexually transmitted infections (STIs) in developing countries was assessed through a comprehensive literature review, to help identify future intervention needs.

The Medline, Embase, and Google Scholar databases were searched to identify studies published between January 1995 and December 2007 on STI PN in developing countries. A systematic review of the research extracted information on: (1) willingness of index patients to notify partners; (2) the proportion of partners notified or referred; (3) client-reported barriers in notifying partners; (4) infrastructure barriers in notifying partners; and (5) PN approaches that were evaluated in developing countries.

According to the study, reported barriers included socio-cultural factors such as stigma, fear of abuse for having an STI, and infrastructural factors related to the limited number of STD clinics, and trained providers and reliable diagnostic methods.

The barriers cited above have just been generalized to developing countries but there is a need to assess the barriers which are specific for Malawi as this can help in strategizing on how to intervene in order to improve partner notification in STI treatment.

2.1.4 Studies on the most likely partners to be notified in clients with multiple sexual partners

In a study quoted above by Crack et al (2007), the type of partners mostly notified by STI patients were assessed.

This study relates to my studies objective as it assessed the type of partners which are mostly notified however there is a gap as the study was done in Peru which is a different setting with Malawi and with different population and my study seeks to fill that gap.

Wakasiaka et al (2003), did a study on "Partner notification in the management of sexually transmitted infections". The study assessed utilization of partner notification as a tool in prevention and control of sexually transmitted infections in Nairobi City Council clinics. It was a cross-sectional study carried out between April and September 2000.

This study found that Primary partners are more likely to be informed than casual or anonymous partners and women more often inform their partners than men. According to the study, qualitative studies of the issue often point to fear of rejection or physical violence from the partner or a general lack of communication skills as reasons for not disclosing STIs to sex partners.

The study found that, most partners who had multiple sexual partners were likely to notify the primary sexual partners than the casual or anonymous partners and this risk the clients as they can be re-infected by the casual partners after being treated. These findings give a picture of the type of partners clients in Kenya notify and also there is a need to assess the same in Malawi as the findings cannot be generalized hence my study will help to fill that gap.

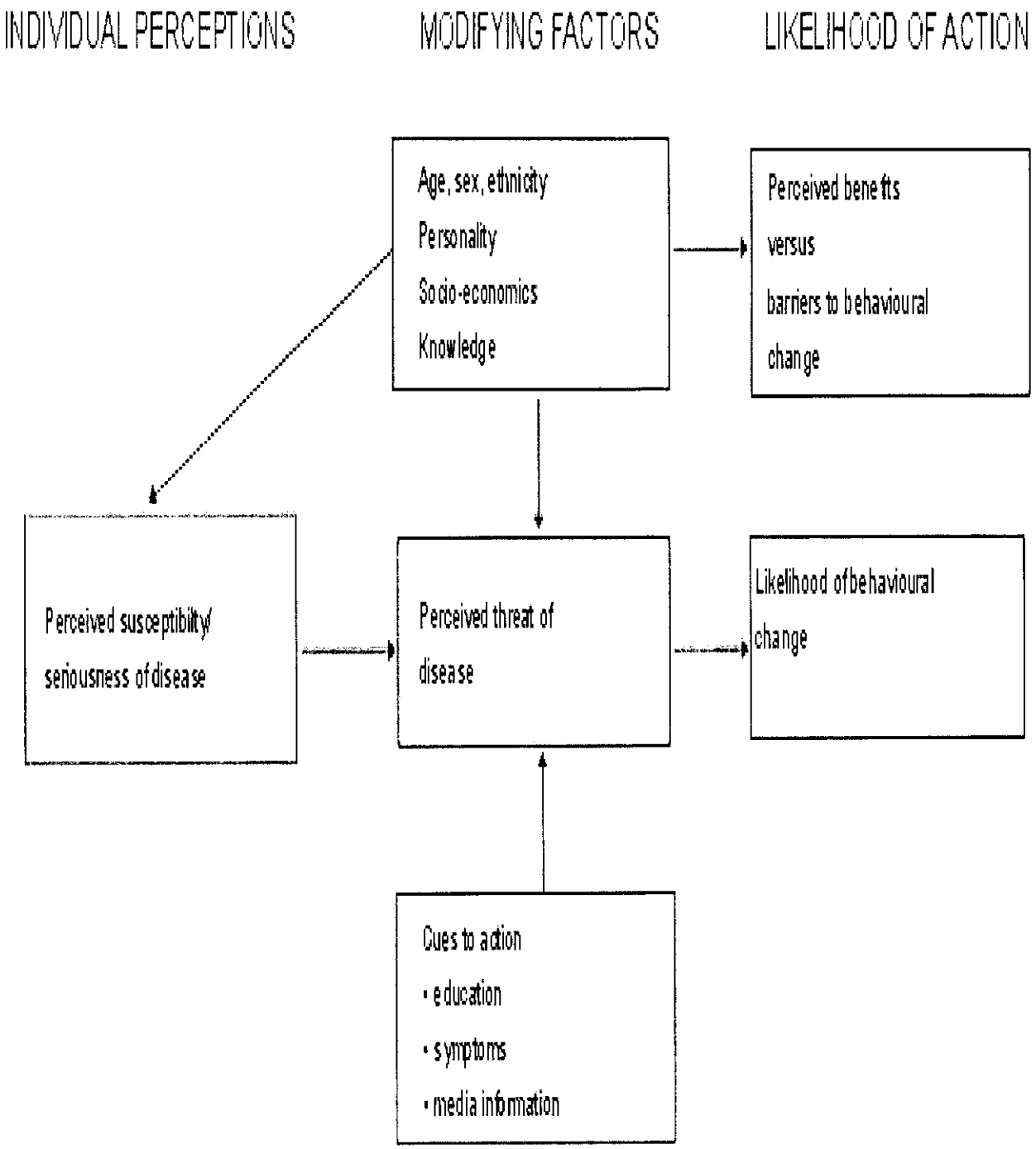
2.2 Conceptual framework

This study seeks to improve partner notification in STI treatment through the assessment of clients knowledge in STI, partner notification, and the different approaches to partner notification; assessment of the health seeking behaviors of STI clients; assessment of the challenges that clients face in partner notification and to determine the type of sexual partners that clients with multiple sexual partners are more likely to notify. This is in line with the health belief model and consequently the health belief model will be used to guide this study.

The health belief model is based on the understanding that, a person will take a health related action, if that person feels that a negative health condition (STI's) can be avoided, has a positive expectation that by taking a recommended action (notifying a sexual partner) he/she will avoid a negative health condition, and believes that he/she can successfully take a recommended health action (i.e. he/she can notify sexual partners successfully), (King, 2001).

According to the model, notifying a sexual partner will be motivated by the perceived seriousness of the STI which will be affected by the modifying factors which are age, personality, socio-economic status and knowledge on top of the cues to action which are education, presence of symptoms and the media information, and the decision to notify the sexual partners will be made after benefits and barriers have been weighed, if the benefits outweigh the barriers, the client is likely to notify the sexual partner and if the perceived barriers outweigh the benefits the client will not notify the partner.

Diagrammatic presentation of the health belief model



Adapted from, Glanz et al, 2002, p. 52

4.0 CHAPTER THREE

4.1 Methodology

4.1.1 Research design

For the purpose of this study, a quantitative design will be used. This design is suitable for the study as it summarizes the status of phenomena of interest as they currently exist and used to quantify the nature of relationship between variables or subjects and to investigate causality or effect of interventions or risk factors. This design is also necessary as the findings of the study can be generalize, (Polit & Hungler, 1999) to a similar population.

The study will use a survey to obtain the data in which a self administered questionnaire will be given to the subjects to respond.

4.1.2 Study setting

This study will be conducted at KCH STI clinic. This is where all the clients that seek STI treatment at the hospital are referred and managed. This will give the researcher easy access to the target population.

4.1.3 Sampling

For the purpose of this study, systematic random sampling will be used to recruit subjects to the study from the population. The sampling starts by selecting an element from the list at random and then every k^{th} element in the frame is selected, where k, the sampling interval (sometimes known as the *skip*) A sample that is representative is required as in quantitative studies the findings can be generalized hence this sampling technique is necessary. The fourth client to be treated for STI's at KCH when data collection begins will be recruited as fist subject and the others will be recruited with a skip of 3 clients.

4.1.4 Sample size

140 participants will be recruited for the study. This sample size (n) has been determined using the formulae:$n = \frac{z^2 p(1-p)}{c^2}$, in which z is the confidence interval (95%), p is the proportion (the estimated STI prevalence for Malawians who are sexually active which is 3.4%) and c is the precision (3%).

4.1.5 Data collection

A questionnaire will be developed by the researcher to collect data. It will be comprised of both open and closed ended questions. The questionnaire will be developed in English but also will be translated to Chichewa to suit those who are not English literate.

Prior to the collection of data, the questionnaire will be pre tested on any four STI patients at Kamuzu Central Hospital. This will help to ensure the validity and reliability of the tool and to check if the questions have been formulated in a way that patients will understand or not. The questions which will not be clear will be modified.

Data will be collected by the researcher using self administered questionnaires in which subjects will respond by answering on the same questionnaire. The questionnaire will be developed in English but will be translated to Chichewa to suit the participants who are not English literate.

4.1.8 Data analysis

The collected data will be analyzed using Standard Service premium (SSP).

4.1.9 Dissemination of results

The results of the study will be disseminated to KCN management, library and head of department of basic studies, MoH and KCH management. The results will be disseminated using dissertations

4.2 Ethical considerations

Informed consent will be sought from each respondent; all the participants will be asked to sign a consent form which will explicitly state the purpose of the study, benefits, risks, and freedom to withdraw, it will also be emphasized that participation is on voluntary basis and there is no money to be given at the end but rather the findings of the study would benefit them as they will improve partner notification in STI treatment. Anonymity will be assured by not asking the names of participants. Confidentiality will be assured as the raw data will not be shared with anybody but rather analyzed by the researcher and the findings disseminated.

In order to ensure that the study is ethically approved, the proposal will pass through the college research committee for ethical review, after the approval, the researcher will seek permission to conduct the study at the stated hospital from MoH as well as the hospital management.

4.3 Time table

Months	July				August				September				October				November				December				January				February			
Weeks	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4P
Identification of topic																																
Proposal writing																																
Proposal approval																																
Clearance and pre-test of questionnaire																																
Data collection																																
Data analysis																																
Report writing																																

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APPENDICES

APPENDIX I

Proposed budget

The research budget shows the materials and services that that will be required during the study and their estimated costs.

Budget table

ITEM	QUANTITY	UNIT COST(MKW)	TOTAL COST(MKW)
STATIONARY			
Reams of paper	2	K2100.00each	K4200.00
Pencils	4	K25.00each	K100.00
Pens	5	K50.00each	K250.00
Eraser	1	K100.00each	K100.00
Tippex	1	K400.00each	K400.00
A4 envelops	5	K80.00each	K400.00
A5 envelops	10	K30.00each	K 300.00
Postage stamps	6	K80 each	K480.00
flash disk	1	K5000.00each	K5000.00
lever arch file	1	K700.00each	K700.00
Ball point pens	10	K 50.00 each	K500.00

SUB TOTAL			**K11830.00**
SECRETARIAL SERVICES			
Proposal printing 50 pages and binding	2 copies	K10.00/page	K1400.00
printing dissertation 50 pages	4copies	K10.00/page	K 2000. 00
binding dissertation	4copies	K130.00/ copy	K520.00
binding proposal	4 copies	K140/copy	K520.00
Photocopying 6 paged questionnaire	160 copies, 60 English and 100 Chichewa	K5.00/page	K4800.00
SUB TOTAL			**K9240.00**
COMMUNICATION			
Phone calls			K2000.00
Local running to other resource centers			K3,000.00
Internet source centers			K2,000.00
SUB TOTAL			**K7 000.00**

DATA COLLECTION		
Training of data collectors (3 individuals)	K2000.00 per individual for 1 day	K 6 000.00
Allowances for data collectors during data collection	K250 per questionnaire	K 26250.00
SUBTOTAL		**K 60320.00**
Contingency	10%	K 6032.00
GRAND TOTAL	**K 66352.00**	

APPENDIX II

Improving partner notification in sexually transmitted infection treatment at Kamuzu central hospital

Questionnaire

Improving partner notification in STI treatment at Kamuzu Central Hospital

Tick the answer that is correct in the spaces provided or fill in where necessary.

Part one: demographic data

1. How old are you?
   I. 10-19 [ ]
   II. 20-29 [ ]
   III. 30 and above [ ]
2. Marital status?
   I. Single [ ]
   II. Married [ ]
   III. Divorced [ ]
   IV. Others (specify).....
3. What is your denomination?
   I. Christianity [ ]
   II. Islam [ ]
   III. Others, specify.....
4. What is your tribe?
   I. Ngoni [ ]
   II. Chewa [ ]
   III. Lomwe [ ]
   IV. Yawo [ ]
   V. Sena [ ]
   VI. Tumbuka [ ]
   VII. Tonga [ ]
   VIII. Others (specify).....

5. What is your occupation?
   I. Employed [ ]
   II. Business [ ]
   III. Student [ ]
   IV. None [ ]
   V. Other (specify).....

Part two: client's knowledge on sexually transmitted infections, importance of partner notification and different approaches to partner notification.

6. Have you ever heard about sexually transmitted infections before?
   I. Yes [ ]
   II. No [ ]
7. What was the source of information?
   I. Friend [ ]
   II. School [ ]
   III. Media [ ]
   IV. Health worker [ ]
   V. Other (specify).....
8. If yes, which STI's do you know? (tick against all the STI's you know)
   I. Syphilis
   II. Gonorrhoea
   III. Chanchroid
   IV. Chlamydia
   V. HIV
   VI. Bubo
   VII. Others (specify.....
9. Have you ever suffered from an STI before?
   I. Yes [ ]
   II. N [ ]
10. Have you ever heard about partner notification in STI treatment?
   I. Yes [ ]
   II. No [ ]

11. If yes, what do you think is the importance of partner notification in STI treatment?

.....

.....

12. If yes to question 10 above, have you ever notified a partner after a diagnosis of STI?

I. Yes [ ]

II. No [ ]

13. Have you ever heard about different approaches to partner notification in STI treatment?

I. Yes [ ]

II. No [ ]

14. If yes to question above, how many approaches to partner notification in STI you know?

I. One [ ]

II. Two [ ]

III. Three [ ]

IV. None [ ]

V. Other (specify).....

15. Which of the approaches do you think is better?

I. Patient referral [ ]

II. Health worker referral [ ]

III. Contract referral [ ]

Part three: to assess the health seeking behaviors of STI clients

16. When did you first notice that you have an STI?

I. Less than two days ago [ ]

II. Between three and five days ago [ ]

III. Above five days ago [ ]

17. Did you take any other medication before seeking treatment from the hospital?

I. Yes [ ]

II. No [ ]

18. If yes to question above, what was the medication?

I. Traditional medicine [ ]

II. Modern medicine [ ]

19. Where did you get the medication?

I. Tradition healer [ ]

II. Pharmacy [ ]

III. Friend [ ]

IV. Other (specify).....

20. What do you think is the importance of seeking STI treatment from the hospital in good time?

I. Prevents ongoing spread of the infection [ ]

II. Reduces risk of development of complications [ ]

III. Reduces the risk of contracting HIV [ ]

IV. Other (specify).....

21. What do you think should be done to ensure STI that clients receive treatment from the hospital in good time?

I. Increasing awareness campaign on STI's [ ]

II. Enforcement of a role to inhibit purchase of antibiotics from pharmacies without prescription [ ]

III. Advising traditional healers to immediately refer STI cases to the hospital [ ]

IV. Other (specify).....

.....

Part four: to assess the challenges that clients face in partner notification

22. Have you ever been advised to notify a partner after a diagnosis of STI

I. Yes [ ]

II. No [ ]

23. If yes to question above, did you meet any challenges to notify the partner

I. Yes [ ]

II. No [ ]

24. What do you think are the challenges in partner notification?

I. Relationship break down [ ]

II. Stigmatization [ ]

III. Being blamed for the infection [ ]

IV. Unable to locate the partner [ ]

V. Gender based violence [ ]

VI. Others (specify).....

25. What do you suggest should be done to deal with these problems?

I. Involve health workers in notifying partners to clients [ ]

II. Increase awareness campaign on partner notification [ ]

III. Other (specify).....

Part five: the type of partners which are mostly notified

26. How many sexual partners do you have?

I. One [ ]

II. Two [ ]

III. More than two [ ]

27. Which type of partner do you think infected you?

I. Primary [ ]

II. Secondary [ ]

28. Between the primary partner (wife) and secondary partners (casual partners), which ones would you notify easily?

I. Primary partner [ ]

II. Secondary partner [ ]

III. Both [ ]

29. Why would you notify the type of partner selected? .....

.....

.....

30. What do you suggest would help so that all types of partners are notified?

I. Involving health workers in notifying partners [ ]

II. Proper counseling by health workers [ ]

III. Other, (specify).....

.....

.....

APPENDIX III

Kafukufuku ofuna kupititsa patsogolo njira yothandizira kulimbana ndi matenda opatsirana pogonana

Mafunso a kafukufu

Chongani kapena kulemba yankho loyenera mmipata yapelekedwa

Gawo loyamba: mbiri yanu

1. Kodi muli ndi zaka zingati?
   I. Pakati pa 10 ndi 19 [ ]
   II. Pakati pa 20 ndi 29 [ ]
   III. 30 kapena kuposera apo. [ ]
2. Kodi muli pa banja?
   I. Sindili pa banja [ ]
   II. Ndili pa banja [ ]
   III. Ndine osiyidwa [ ]
   IV. Zina (lembani).....
3. Ndinu a chipembedzo chanji?
   I. Chikhilisitu [ ]
   II. Chisilamu [ ]
   III. Zina (lembani).....
4. Ndinu mtundu wanji wa anthu
   I. Ngoni [ ]
   II. Chewa [ ]
   III. Lomwe [ ]
   IV. Yako [ ]
   V. Sena [ ]
   VI. Tumbuka [ ]
   VII. Tonga [ ]
   VIII. Zina (lembani).....
5. Kodi mumagwira ntchito yanji?
   I. Ndiri pa ntchito [ ]

II. Ndimapanga bizinesi [ ]

III. Ndiri pa sukulu [ ]

IV. Sindimagwira ntchito iliyonse [ ]

V. Zina (lembani).....

Gawo la chiwiri: zomwe mukudziwa pa nkhani ya nkhani ya matenda opatsirana pogonana, kufunika kodziwitsa a chikondi anu pamene mwapezeka ndi matenda opatsirana pogonana, ndi za mmene okondedwa anu angadziwire za matenda opatsirana pogonana omwe mwapezeka nawo.

6. Kodi munayamba mwamvapo za matenda opatsirana pogonana?
   I. Eya [ ]
   II. Ayi [ ]
7. Ngati munamvapo, munamva kuchokera kwa ndani?
   I. Mzanga [ ]
   II. Sukulu [ ]
   III. Pa wailesi [ ]
   IV. Kwa ogwira ntchto ku chipatala [ ]
   V. Kwina, (lembani).....
8. Kodi ndi matenda ati opatsirana pogonana amene mumawadziwa?
   I. Chindoko [ ]
   II. Chizonono [ ]
   III. Mauka [ ]
   IV. HIV [ ]
   V. Mabomu [ ]
   VI. Zina (lembani).....
9. Kodi munayamba mwadwalapo matenda opatsirana pogonana m'mbuyomu?
   I. Eya [ ]
   II. Ayi [ ]
10. Kodi munamvapo za njira zomwe a chikondi anu angadziwitsidwire pamene mwapezeka ndi matenda opatsirana pogonana pofuna kuti nawonso alandire thandizo loyenera?
    I. Eya [ ]
    II. Ayi [ ]

11. Ngati munamvako, kodi mukuona ngati ubwino odziwitsa achikondi anu pomwe mwapezeka ndi matenda opatsirana pogonana ndi chain?.....
.....
.....
.....

12. Ngati munayankha eya pa funso 10, kodi munayamba mwadiwitsapo achikondi anu mutapezeka ndi matenda opatsirana pogonana?
    I. Eya [ ]
    II. Ayi [ ]

13. Kodi munamvapo za njira zingapo zomwe achikondi anu angadziwire za matenda opatsirana pogonana amene mwapezeka nawo?
    I. Eya [ ]
    II. Ayi[ ]

14. Ngati munanvapo, ndi njira zingati zomwe mukudziwa?
    I. Imodzi [ ]
    II. Ziwiri [ ]
    III. Zitatu [ ]
    IV. Palibe [ ]
    V. Zina (lembani).....

15. Ndi njira iti mwa njira zomwe munamvapo, yomwe mukuganiza kuti ndi yabbwino kuposa zinzake?
    I. Yodzera mwa odwala [ ]
    II. Yodzera mwa achipatala [ ]
    III. Yodzera mwa achipatala nagati odwala alephera kudziwitsa achikondi awo pa masiku oyikika [ ]

<u>Gawo lachitatu: za kalandilidwe ka thandizo la kuchipatala ka odwala matenda opatsirana pogonana.</u>

16. Kodi munazindikira liti kuti muli ndi matenda opatsirana pogonana?
    I. Osapitilira masiku awiri apitawa [ ]
    II. Pakati pa masiku atatu andi asanu apitawa [ ]
    III. Kupitilira masiku asanu apitawa [ ]

17. Munamwapo mankwala ena ali onse musanaganize zobwera kuno ku chopala?
    I. Eya [ ]
    II. Ayi [ ]
18. Ngati eya pa fuso 19, ndi mankwala anji munamwawo?
    I. Achikuda [ ]
    II. Achizungu [ ]
19. Nanga mankwala amenewa munawatenga kuti?
    I. Kwa sing'anga [ ]
    II. Kugula ku sitolo [ ]
    III. Ndinatenga kwa mzanga [ ]
    IV. Kwina (lembani).....
20. Kodi mukuona kuti ubwino olandira thandizo la kuchipatala pamene mukuganizira kuti muli ndi matenda opatsirana pogonana ndi chain?
    I. Zimateteza anthu ena kutengera matendawa [ ]
    II. Zimathandizira kuti matendawa asfalikire ndi kusokoneza kagwiridwe nchtito ka thupi? [ ]
    III. Zimathandizira kupewa kutengera matenda a HIV [ ]
    IV. Zina (lembani).....
21. Mukuona ngati boma lichite chani pofuna pofuna kuonetsetsa kuti odwala matenda opatsirana pogonana akulandira thandizo nthawi yoyenera?
    I. Kuphunzitsa anthu zokhudza matenda a edzi [ ]
    II. Kulimbikitsa lamulo loretsa kugula mankhwala ku sitolo popanda kulembeledwa ndi a dokotala [ ]
    III. Kulangiza a sing'anga kuti azitumiza kuchipatala anthu odwala matenda opatsirana pogonana mwachangu [ ]
    IV. Zina (lembani).....

<u>Gawo la chinayi: zovuta zomwe odwala amakumana nazo pamene alangizidwa kuti akadziwitse achikondi awo za matenda opatsirana pogonana omwe apezeka nawo</u>

22. Kodi munalangizidwapo ndi achipatal kuti mukadziwitse okondedwa anu kuti mwapezeka ndi matenda opatsirana pogonana?
    I. Eya [ ]

II. Ayi [ ]

23. Ngati munalangizidwapo, munakumanako ndi zovuta zili zones kuti mudziwitse okondedwa anu za matenda opatsilana pogonana amene munapezeka nawo?
    I. Eya [ ]
    II. Ayi [ ]
24. Ndi zovuta zanji zomwe munakumana nazo?
    I. Kutha kwa banja kapena chibwenzi [ ]
    II. Kusalidwa [ ]
    III. Kutengedwa ngati ndinu amene mwabweletsa matendawo [ ]
    IV. Kulephera kuwapeza anthu ogonana nawo [ ]
    V. Nkhaza za m'banja [ ]
    VI. Zina (lembani).....
25. Ndiye mukuona ngati tingatani kuti tithane ndi vutoli?
    I. Achipatala atengepo gawo podziwitsa ogonana nawo a odwala [ ]
    II. Kuphunzitsa anthu zokhudzana ndi matenda opatsirana pogonana [ ]
    III. Zina (lembani).....

Gawo la chisanu: za achikondi ogonana nawo

26. Kodi muli ndi achikondi angati ogonana nawo?
    I. Mmodzi [ ]
    II. Awiri [ ]
    III. Kupitilira awiri [ ]
27. Kodi mukuona ngati anakupatsirani matendawa ndi ndani
    I. Akazi anga [ ]
    II. Chibwenzi [ ]
    III. Hule [ ]
    IV. Ena (lembani).....
28. Pakati pa akazi anu ndi chibwenzi, ameme simungavutike kuwadziwitsa za matenda opatsirana pogonana amene akupezani zawo kuchipatala ndi ati?
    I. Akazi anga [ ]
    II. Chibwenzi [ ]
    III. Onse [ ]

29. Ndi chifukwa chain mukuona ngati ndikosavuta kudziwitsa amene mwasankha pa funso 27?.....

.....

30. Ndiye mukuona ngati ndi chain chimene chingathandize kuti anthu onse ogonana nawo azidziwitsidwa za matenda opatsirana pogonana amene mwapezeka nawo?

I. Achipatala atenge nawo gawo podziwitsa agonana nawo a odwala [ ]

II. Kuphunzitsa mokwana odwala za ubwino odziwitsa ogonana nawo onse za matenda omwe apezeka nawo [ ]

III. Zina (lembani).....

APPENDIX IV

CONSENT FORM

Kamuzu College of nursing

Private bag 1

Lilongwe

Date .....Dec., 2012.

Dear participant,

I am Charles Jenya Soko, a fourth year student pursuing Bachelor of Science in nursing and midwifery at Kamuzu College of Nursing. In partial fulfillment of bachelors' degree, I am required to do a research of my own interest. The topic of my study is **improving partner notification in STI treatment at Kamuzu Central hospital.** The purpose of the study is to explore ways to improve partner notification in STI treatment hence ensuring early diagnosis and treatment of STI's. You are one of the participants chosen to answer the questions contained in this study. You are informed that participation to the study is voluntary as such you are not under any circumstances forced to participate hence you are free to withdraw your participation at any time and that will not attract any penalty. As a participant there is no direct benefit and risk but the findings will help to explore ways to improve partner notification hence reducing the incidence of recurrent STI's in our hospitals

You will not be asked to write your name on the questionnaire for anonymity and for the sake of confidentiality and privacy, your information will not be shared to other people except those directly involved in the study.

Thank you

Declaration

I have clearly understood the requirements and the contents of this letter and I therefore give a consent to take part in the study freely and voluntary.

Signature of participant..... Date .....

signature of the researcher.....Date .....

APPENDIX V

CHILOLEZO CHOTENGA NAWO GAWO MU KAFUKUFUKU

Ine ndine Charles Jenya soko, ophunzira pa sukulu ya ukchenjede ya unamwino ya kamuzu ndipo ndili mchaka chomaliza. Ngati mbali ya maphunziro anga, ndikuyenera kupanga kafufuku. Kafufuku wanga ndi ofuna kupeza njira zomwe zingathandize kupititsa patsogolo njira yodziwitsa ogonana nawo pamene mwapezeka ndi matenda opatsirana pogonana pa chipatala chachikulu cha Kamuzu.

Ndiye ndikukupemphani kuti inuyo mutenge nawo gawo mu kafukufuku ameneyu. Kafukufukuyu ndiwothandiza kwambiri chifukwa choti zotsatira zakez zizagwiritsidwa ntchito kupeza njira zimene zingathandize kupititsa patsogolo njira yodziwitsa ogonana nawo za matenda opatsirana pogonana amene mwapezeka nawo potero kupewa kutengeranso matendawa pamene mwalandira thandizo. Palibe cholowa chilichonse chomwe chidzaperkedwe kwa anthu amene angatenge nawo mbali mu kafukufuku ameneyu. Kuonjezeranso apo palibe kuopsa kulikonse potenga nawo gawo mu kafukufuku ameneyu. Ndikufunsani mafunso pa pepara ndipo mudzayankha pa pepara pomwepo . Panthawi imene mwafuna kusiya kutenga nawo gawo mu kafukufukuyu muli ndi ufulu kutero. Muli ndi ufulunso oyankha mafunso amene muli omasuka nawo ndikusiya amene simukufuna kuyankha. Ngati mbali imodzi yosungira chinsinsi, mayina sadzagwiritsidwa ntchito mmalo mwake, tidzagwiritsa ntchito ma nambala. Opanga kafukufukuyu ndi othandizira ndi anthu okhawo amene adzaone mayankho onse operekedwa. Mafunso onse ndi olandiridwa.

CHILOLEZO

Ndikugwizana nazo mfundo zones zomwe zanenedwazi; ndipo ndikuvomera kutenga nawo gawo pa kafukufuku ameneyu.

Wotenga nawo mbali(Lembani kapena dindani ndi chala).....

Tsiku.....

WOPANGA KAFUKUFUKU

CHARLES JENYA SOKO

APPENDIX VI

PERMISSION LETTER TO KCN RESEARCH COMMITTEE

Kamuzu College of Nursing,

P/Bag 1,

Lilongwe.

9 November, 2012.

The Chairperson

KCN RPC Committee

Private bag 1,

Lilongwe

Dear sir/madam

REQUEST FOR APPROVAL TO CONDUCT STUDY

I am a fourth year student pursuing Bachelor of Science in nursing and midwifery generic programme. In partial fulfillment of the degree programme, I am required to carry out a research project. The title of my study is **improving partner notification in STI treatment at Kamuzu central hospital.** I therefore write to apply for approval to conduct this study.

Your consideration will be highly appreciated.

Yours faithfully,

.....

CHARLES JENYA SOKO

APPENDIX VII

PERMISSION LETTER TO KAMUZU CENTRAL HOSPITAL

Kamuzu College of nursing

P/Bag1

Lilongwe

9 November, 2012.

The Director,

Kamuzu Central Hospital,

P.O. Box .....

Lilongwe.

Through Kamuzu college of nursing Research committee

Dear Sir /Madam,

PERMISSION TO CONDUCT A RESEARCH STUDY AT KAMUZU CENTRAL HOSPITAL

I am Charles Jenya Soko, a fourth year student doing Bachelor of Science degree in nursing and midwifery (generic). In partial fulfillment of my studies, I am required to conduct a study. This letter therefore seeks to ask for permission to conduct a study at Kamuzu Central Hospital. The title of my study is **improving partner notification in STI treatment at Kamuzu central hospital.** The purpose of the study is to explore ways to improve partner notification in STI treatment. Systematic random sampling will be used to select participants. The questionnaire will be used to collect the data. It has been formulated from the study objectives in English and translated to Chichewa.

Your consideration will be highly appreciated.

Yours faithfully,

.....

CHARLES JENYA SOKO