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KNOWLEDGE AND ATTITUDE ON PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV AMONG PREGNANT WOMEN ATTENDING REPRODUCTIVE AND CHILD HEALTH CLINIC AT TEMEKE DISTRICT HOSPITAL IN DAR ES SALAAM,2010.

 $\mathbf{B}\mathbf{y}$

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A dissertation Submitted in partial Fulfillment of the Requirement for the Degree of Master of Medicine (Obstetrics and Gynecology) of the Muhimbili University of Health and Allied Sciences

Muhimbili University of Health and Allied Sciences 2011

CERTIFICATION

The undersigned certify that he has read and hereby recommends for acceptance by the Muhimbili University of Health and Allied Sciences a dissertation entitled: "Knowledge and attitude on Prevention of Mother To Child Transmission of HIV among pregnant women attending Reproductive and Child Health clinic at Temeke District Hospital in Dar Es Salaam" in partial fulfillment of the requirements for the degree of Masters of Medicine in Obstetrics and Gynecology of the Muhimbili University of Health and Allied Sciences.

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Date

DECLARATION

I, Dr Nyasinde Mujumali, declare that this d	issertation is my own work and that it has not been
presented and will not be presented to any	other university for a similar or any other degree
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DEDICATION

This book is dedicated to my husband Dr Albert, my daughters Highness and Heather and my mother Agnes Mujumali.

ABSTRACT

Background

The acquired immune deficiency syndrome (AIDS) epidemic is the greatest challenge to human kind in the 21st century. In 2009, around 400,000 children under 15yrs became infected with HIV. Almost all of these infections occured in Sub Saharan countries, and more than 90% are a result of mother-to-child transmission (MTCT) during pregnancy, labour and delivery, or breastfeeding. Transmission during pregnancy is 5 - 10%, during labor and delivery is 10 - 20% and during breastfeeding is 10 - 15%. Without interventions, there is a 20-45% chance that a baby born to an HIV infected mother will become infected.

However the risk of MTCT can be reduced up to 2% if comprehensive approach of PMTCT will be put in place. MTCT of HIV has a dramatic deleterious impact on child survival and therefore PMTCT is of crucial importance.

Objectives: To assess knowledge and attitude on PMTCT of HIV among pregnant women attending Reproductive and Child Health clinic at Temeke District Hospital, Dar Es Salaam.

Methodology: A cross sectional study was conducted from October 2010 to January 2011 at Temeke District Hospital RCH Clinic in Dar-Es –Salaam. Structured questionnaires were administered to all pregnant women at the clinic who have had the opportunity to be counseled and tested for HIV in their antenatal clinics in different primary health centers in Temeke District.

The information was then summarized into SPSS version 17.0, for windows and analyzed. Frequency distribution and two way tables were used to summarize the data.

Results: A total of 351 pregnant women fulfilling the inclusion criteria were included in the study. Out of these, 237(67.5%) were HIV negative and 114 (32.5%) were HIV positive. The mean age was 27.2 and SD 6.3. Married participants formed 68.9% and 86.9% had primary education. Sixty nine respondents, 19.7% had good, 61.8% moderate and 18.5% had poor basic HIV/AIDS knowledge. Only 15.7% had good, 49.9% had moderate and 34.5% had poor knowledge on mother to child transmission of HIV and its prevention. The attitude towards the PMTCT of HIV was generally positive which comprised 318 (90.6%) of the respondents.

Conclusion: Though the level of basic knowledge of HIV/AIDS was shown to be moderate to good in pregnant women, almost half of pregnant women even after counseling attained only moderate knowledge on PMTCT. Since there are still knowledge gaps on different but important aspects of PMTCT, there is a need for adequate counseling including more sessions during pregnancy, more public campaigns to encourage early ANC attendances.

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LIST OF ABBREVIATIONS:

AIDS Acquired Immune Deficiency Syndrome

ANC Antenatal clinic

ARV Antiretroviral drugs

CTC Care and Treatment Clinic

HIV Human Immunodeficiency Virus

MNH Muhimbili National Hospital

MOHSW Ministry of Health and Social Welfare

MTCT Mother To Child Transmission of HIV

MUHAS Muhimbili University of Health and Allied Science

PLWH People living with HIV

PMTCT Prevention of Mother to Child Transmission of HIV

PROM Premature Rupture of Membranes

VCT Voluntary Counseling and Testing

WHO World Health organization

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1.0 INTRODUCTION

The Acquired Immune Deficiency Syndrome (AIDS) epidemic is the greatest challenge to human kind in the 21st century. AIDS was first recognized in 1981 and is caused by human immunodeficiency virus (HIV) which was isolated in USA by the end of 1983. There are two types, namely HIV-1 and HIV-2. HIV-1 is more common, infects people worldwide and causes AIDS. HIV-2 though less aggressive and found mainly in West Africa causes a similar illness.

In 2009, around 400,000 children below 15yrs became infected with HIV.¹ Almost all of MTCT infections occured in Sub Saharan Africa, and more than 90% are as a result of mother-to-child transmission (MTCT) during pregnancy, labour/delivery, and breastfeeding. Transmission during pregnancy is about 5 - 10%, during labor and delivery is 10 - 20% and during breastfeeding is 10 - 15%.² Without interventions, there is a 20-45% chance that a baby born to an HIV-infected mother will become infected.³

The risk of MTCT can be reduced up to 2% if comprehensive approach of PMTCT will be put in place.³ These comprehensive approach include the following elements, primary prevention of HIV among women of childbearing age and their partners, prevention of unintended pregnancies among women infected with HIV, prevention of HIV transmission from mothers to their infants, provision of treatment, care and support to women infected with HIV and their partners, infants and families. In other words we can say MTCT of HIV has a dramatic deleterious impact on child survival and therefore PMTCT is of crucial importance.

HIV/AIDS has affected every level of society in Tanzania. The current estimates are that 1.8 million people are living with HIV nationally, most of them are adults in their most productive years. The National HIV prevalence rate among adults 15-49 years of age is 7%. Rates of AIDS-related morbidity and mortality are increasing steadily among adults, particularly women, as is AIDS-related mortality in children less than 5 years of age. HIV has orphaned approximately 1 million children in the country. ⁵

There is still fear of disclosing one's HIV status (or of learning it) because of the stigma that exists for people leaving with HIV/AIDS (PLWH) which hinders women from seeking PMTCT services and results in poor adherence to PMTCT interventions, in particular safer infant-feeding decisions. Being open about one's HIV status is one of the most powerful ways to reduce HIV-related stigma. Disclosing one's status also has other benefits.

It can encourage partners to be tested for HIV and prevent the spread of HIV by allowing those infected to openly take appropriate prevention steps. Therefore knowledge and awareness on PMTCT of HIV has an impact on the practice of HIV testing, taking medication and attitude toward PMTCT interventions among pregnant mothers

1.1 THEORETICAL CONTEXT

The theoretical models of the study applied were The Health Belief Model (HBM) and AIDS Risk reduction models. The health belief model was developed in 1950 and holds that health behaviour is a function of individual's socio-demographic characteristics, knowledge and attitudes. According to this model a person must hold certain beliefs in order to be able to

change behaviour. This means that promoting action to change a particular behaviour includes changing individuals personal beliefs. ⁶

The model is also based on the premise that the likelihood of engaging in preventive health behaviour is influenced by certain beliefs about a given condition. The model asserts that the individual will take preventive health action when they feel susceptible to a certain condition and they feel that contracting the disease has serious consequences compared to the perceived benefits accruing from the same behaviour.

The AIDS risk reduction model developed in 1990 specifically for AIDS prevention was also used for the study. The model uses constructs from health belief model to describe the process individuals go through while changing behavior regarding HIV risk. The model identifies three stages involved in reducing risk for HIV transmission. In the first stage knowledge about HIV transmission and perceived susceptibility to HIV/AIDS influence how women perceive AIDS. The commitment to change is shaped by perceptions to self-efficacy and social norms. In the last stage of taking action, help seeking behaviour and social factors affect the pregnant women's decision-making process.

1.1. LITERATURE REVIEW

The World Health Organization estimates that over 1.5 million children worldwide have been infected with HIV through MTCT. ⁷

Estimates by UNAIDS/WHO 2008 shows that the percentage of women infected with HIV globally has been roughly the same over the last several years. Half of the adults aged 15 years or above living with HIV are women and most are in sub-Saharan Africa where the ratio between women and men is 3 to 1. The concentration of HIV infected children in sub-Saharan Africa reflects the estimates that about 60% of HIV infected adults are women and that women in Africa tend to have more children than elsewhere in the world. 8

A study conducted in an inner-city hospital in Atlanta to determine the effectiveness of HIV counseling on the acquisition and retention of HIV knowledge before counseling, after and 48hours post partum showed that, HIV counseling increases short term knowledge but there is a decrease in knowledge with time. ⁹

It was also shown in Gaborone, Botswana in 2003 that 67% of pregnant women got PMTCT information from clinic counselors, 74% from radio and about 69% answered correctly more than 9 out of 12 factual questions about PMTCT. Almost all respondents, 94% believed that all pregnant women should be tested for HIV but only 56% had been tested. ¹⁰

In Lagos, Nigeria Ekaneem studied on knowledge and acceptability of HIV voluntary counseling and testing in pregnancy as a strategy for PMTCT of HIV among women attending ANC at two health facilities.

The study revealed that 89.9% had good knowledge of the modes of HIV transmission but knowledge of specific aspects of PMTCT was poor. Forty one percent were not aware of the association between breast milk and HIV transmission and awareness of ARV drugs among the study group was poor).¹¹

It was shown in rural Nigeria that among women attending ANC all were aware of HIV/AIDS despite their level of education, 90% were aware that HIV infection could co-exist with pregnancy. About 68% were aware of MTCT but there was low knowledge of routes/modes of MTCT and more than half did not know about PMTCT. ¹²

It was shown in Eastern Cape in South Africa that most pregnant women 92.4% and their husbands or partners 84% never had an HIV test. The barriers being fear of being positive, unaware of where to get tested and lack of confidentiality of the test results. On the other hand factors that encouraged them to go for a test were having HIV/AIDS information, wanting to know HIV status and concern for the transmission from mother to the unborn child.¹³

Poor antenatal counseling and HIV testing services are important barriers for PMTCT. This was shown in a study done in rural eastern Uganda where 10% of women who attended ANC accepted to test for HIV before being counseled. This supported the report from Mombasa, which pointed out that, the quality of antenatal HIV counseling in a routine setting was associated with increasing rates of testing for HIV and PMTCT awareness. ¹⁴

Evaluation of the UNICEF sponsored PMTCT pilot project done in Tanzania in 2002 to obtain local experience and determine the feasibility of integrating PMTCT within ANC and MCH services showed that majority of women delivering at regional and district health facilities

were of unknown status. Counseling rates ranged from 9-56%, high acceptance and good use of HIV rapid testing found to be 80%. It was also found that not all staff assigned to ANC had PMTCT training. There was lack of skills, materials, job aids and scripts for HIV related counseling, infant feeding, family planning, prevention and on going support counseling, low male involvement and community participation.¹⁵

A significant number of women do not benefit from PMTCT services. This was shown in a study done by Ngarina, MM, 2004 in Tanzania at Muhimbili National Hospital (MNH) on acceptance of counseling, HIV testing and prophylactic use of Nevirapine in labour and immediate pueperium. It was shown that, 46.7% of women in labor during the study period were of unknown status and 53.3% were of known status.¹⁶

The Mitra plus study done in Tanzania on prevention of mother to child transmission of HIV 1 through breastfeeding by treating mothers with triple ART reveled that HAART given to infected mothers in late pregnancy and breastfeeding period resulted in low postnatal HIV transmission.¹⁷

In another study done in Tanzania at the Kilimanjaro Christian Medical Centre (KCMC) on testing a PMTCT infant feeding counseling program where mothers were given brochures to take and read at home with the objective of improving PMTCT counseling and infant feeding knowledge and practices of HIV+ and HIV- mothers it was shown that the program increased knowledge and practices.¹⁸

In an analysis done in Uganda and Tanzania to analyze awareness and knowledge about HIV and prevention of mother to child transmission and preventive measures in different populations, of 410 clients of ANC and outpatients who were interviewed in southwestern Tanzania 67% had knowledge on MTCT during pregnancy and 78% knew the association between breastfeeding and MTCT.¹⁹

Inadequate knowledge about HIV/AIDS, MTCT and its prevention and a bad attitude towards HIV prevention information and services are major setback to success of PMTCT programme efforts. Information gathered will help to identify existing knowledge gaps that pregnant women acquire after being counseled. The information can be implemented by private and public programmers towards optimizing provision of PMTCT services.

2.0. PROBLEM STATEMENT

Despite improvements in PMTCT services over the years, MTCT of HIV infections is high especially in sub-Saharan Africa. In 2009 alone around 400,000 children less than 15yrs became infected with HIV and 1.3 million children and adults died of AIDS.¹

Almost all of these infections occur in sub Saharan Africa, and more than 90% are as a result of mother-to-child transmission (MTCT) during pregnancy, labour/delivery, and breastfeeding.

Studies done in Uganda and Tanzania on awareness and knowledge about HIV and PMTCT in pregnant women, in southwestern Tanzania shows a low level of knowledge on MTCT during pregnancy and moderate knowledge on the risk of breastfeeding and MTCT.¹⁹

The risk of MTCT can be reduced up to 2% if comprehensive approach of PMTCT will be put in place.³ Treating mothers with ARV in late pregnancy and breastfeeding period has shown to result in low postnatal HIV transmission.¹⁷ However little information is available on pregnant women's knowledge and attitude towards PMTCT intervention, ³ and whether there are educational and behavioral change impacts from antenatal HIV counseling.

2.1. RATIONALE OF THE STUDY

The purpose of this study was to assess the acquisition of knowledge about HIV MTCT among pregnant women who have been counseled on PMTCT and their attitude towards PMTCT interventions. Knowledge of the interventions of PMTCT is important, so that pregnant women can be aware and through motivation they can have a positive attitude towards PMTCT.

However there were a number of factors that influenced knowledge and attitude of the pregnant women in this study. These included socio- demographic characteristics such as age, marital status, educational level and the occupation. The attitude people have towads HIV/AIDS in general and PMTCT in particular also affects utilisation of PMTCT services. However people develop the attitude about certain services after knowing what the services are. For this case the attitude towards PMTCT services was influenced by the knowledge respondents had.

Results from this study will be applied in Temeke district to provide information on knowledge of pregnant women on PMTCT after counseling and their attitude towards PMTCT interventions. And this information will improve PMTCT services in Temeke district. Results will also be used as a basis for further research in issues concerning PMTCT especially in Temeke region.

3.0. RESEARCH QUESTION.

What is the knowledge of pregnant women on PMTCT after going through counseling and their attitude towards PMTCT interventions?

3.1. OBJECTIVES

3.1.1. Broad objective

To assess knowledge and attitude on PMTCT of HIV among pregnant women attending Reproductive and Child Health Clinic at Temeke District Hospital in Dar Es Salaam.

3.1.2. Specific objectives

- 1. To determine the level of basic knowledge about HIV/AIDS in pregnant women.
- 2. To assess pregnant women's knowledge on when MTCT may occur.
- 3. To determine pregnant women's knowledge on when to start prophylaxis for PMTCT.
- 4. To assess knowledge of pregnant women on risk factors that increase MTCT during breastfeeding.
- 5. To assess attitude of pregnant women on PMTCT of HIV.

4.0. METHODOLOGY

4.1. Study design

The study design was a cross sectional study which used to establish pregnant women's knowledge on PMTCT and their attitude towards PMTCT.

4.2. Study area description

Temeke is one of the three districts of Dar-Es Salaam city with 3 divisions 24 wards and covers 656 Square Kilometers. According to 2002 Census the population was estimated to be 771,500 with annual population rate of 4.3%. It has a total of 109 health Facilities both government and private. The main financial activity is small scale businesses.

Over the past four years Temeke has established itself well on HIV/AIDS. From 12 VCT sites providing counseling and testing in 2006 to 60 sites in 2009. In the year 2007 to 2009 the number of PMTCT sites increased from 6 to 65 sites. The number of care and treatment clinics increased from 2 in 2006 up to 11 in 2009. According to a PMTCT monthly report for three months from October to December 2009 there were a total of 55 reporting sites to Temeke district. The number of new clients was 9,586 0f which 266 were previously known to have HIV infection. The total number of clients who tested was 9,420 and the total number of new clients who tested was 9,286 and 691 tested positive. Number of partners who tested was 296 of which 27 were HIV positive. The total number of clients who received post test counseling for positive and negative results were 9,835. ²²

4.3. Study population

All pregnant women who attended the Reproductive and Child Health clinic at Temeke district hospital from 10th October 2010 to 10th Jan 2011.

4.4. Study setting

The study was done at Temeke district hospital Reproductive and Child Health clinic. The clinic receives referrals from all the health centers in the district. Pregnant and gynecological clients who attend the clinic have already been counseled and tested for HIV in their ANC and are referred for various reasons including CD4+ estimation, ARV prophylaxis and treatment and other obstetrical complications. During counseling and testing pregnant women are given a group pre-test education where standard information about HIV/AIDS infection and disease, HIV transmission and prevention, benefits and risks of HIV testing for pregnant women, HIV testing processing and confidentiality, partner testing and discordance, effects of results, safer sex, ANC, client discussion and questions. Afterwards in a private room HIV tests (provider initiated) are perfomed and post test counseling is done according to test results. For HIV negative clients a discussion on partner testing, safer sex and risk reduction, EBF,ANC is given and a schedule to repeat the test is given.

The clinic has four offices, and receives at least twenty to thirty clients every day. One office is used to receive patients and here is where the vital signs and weight measurements are taken.

The second office is for the nurse in charge of the clinic. The third office is used for contraception and the fourth is a consultation room.

There is a waiting place where clients wait and has a capacity of holding up to forty clients.

4.5. Study period

The study was conducted from 10^{th} October 2010 to 10^{th} Jan 2011.

4.6. Sample size estimation.

Sample size was calculated using the following formula

$$n = \underline{Z^2P (1-P)}$$

 E^2

Where;

n= required sample size

Z=reliability coefficient at 95% confidence interval (standard value of 1.96)

P=Proportional of targeted population which have knowledge of PMTCT. This estimated from previous study done in Gabarone, Botswana. The proportion found to be 69%

E= Margin of error at 5% (standard value 0.05)

Therefore from the formula above

$$N = 1.962 \times 69 (100 - 69)$$

25

$$N = 330$$

The sample size was taken to be 330

Sampling

Convenient sampling method was used where all eligible women were asked to participate in the study.

Inclusion criteria

All pregnant women who attended RCH Clinic who have had counseling on PMTCT.

Exclusion criteria

Those who refused to participate after explanation about the purpose of the study. Those who were too sick to participate in the study.

Research assistants

An experienced nurse midwife on PMTCT and a medical doctor were trained for two days by the principle investigator on the purpose of the study, how to select patients, consent form administration and questionnaire filling.

4.7. Research instruments, measurements and data collection

A pre- visit was done and the questionnaires were pre-tested. English questionnaires were translated into Swahili and then back into Swahili. Swahili structured questionnaire were then fully developed and used for data collection.

The questionnaire had five parts.

Part one

Included clients socio demographic information for example age, client's marital status, level of education, occupation and HIV status.

Part two

Gathered information about client's basic HIV/AIDS knowledge. This part included five questions on modes of transmission, risk factors and preventive measures.

Part three

Contained questions specific to mother to child transmission of HIV and included seven questions. The questions were used to enquire information on whether pregnant women knew of the possibility of an infected pregnant woman transmitting the infection to her unborn child, the timing of transmission, risk factors that increase transmission during pregnancy, labour and delivery. It also included information on preventive measures and the timing of ARV prophylaxis.

Part four

Enquired information on infant feeding knowledge for HIV positive mothers, risk factors that increase mother to child transmission during breastfeeding and it included three questions.

Part five

Assessed attitude towards PMTCT and included 8 questions. These questions assessed client's feelings on the importance of HIV testing for every pregnant woman, their feelings about HIV infected women getting pregnant, on the issue of using protective gears (condoms) during pregnancy and breastfeeding.

Some questions inquired opinions on why some mothers breastfeed beyond six months despite being HIV infected and for those infected, whether they feel/think their families will support them on the modes of feeding their babies and if they supported the National strategies for PMTCT.

Data collection

The principal investigator and research assistants approached individually pregnant women attending the clinic to explain the purpose of the study and asked for consent for them to participate. Only those who consented were enrolled in the study. A room was prepared for the principal investigator for interview and both the research assistants had their working rooms that they used. The interviews took a maximum of 20min and women were interviewed after consultation with the doctor. Before the interviews clients were requested to sign a written consent and were given a chance to ask questions after the interviews. Clarifications were given to clients who had the poorest knowledge.

Measurement of Knowledge and attitude

Knowledge

Basic knowledge questions were assessed using participant's correct responses. The five questions had a total of 14 points. Each correct response was given a score of 1 and a wrong response a score of 0. The points assessed basic knowledge on transmission (5 points – knowledge on how HIV is transmitted, unsafe blood transfusion, sharing sharps with an infected person, mother to child transmission, unprotected sexual intercourse),

risk factors (6 points – knowledge on the risks of HIV transmission, unprotected sexual intercourse with an infected person, multiple sexual partners, having sexually transmitted infections, intravenous drug abuse) and preventive measures (3 points – abstinence, having one faithful sexual partner, condom use).

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On assessment, Modified Bloom's cut off points was used during analysis which was adopted from Ms Nahida's KAP study (appendix 1 shows original Blooms cut off points). A score of 75% – 100%, 50% – 74% and less than 50% placed the respondent in good, moderate and poor basic HIV/AIDS knowledge respectively.

Ten questions assessing participants knowledge on mother to child transmission during pregnancy, labour and delivery and breastfeeding had a total of 26 points. and Bloom's cutoff points were used. A score of 1 was assigned for a correct response and 0 for a wrong response.

Therefore the scores were as follows:

- i) 20 26 points = good knowledge
- ii) 15 19 points = moderate knowledge
- iii) 0 14 points = poor knowledge

Attitude

Attitude was assessed by 8 questions. These were put on a likert's scale and respondents were provided with statements asked to indicate the extent to which they agree with those statements on whether they strongly agree, agree, have no opinion, disagree or strongly disagree with what they were asked. The scoring system used with respects to respondents' responses was as follows: strongly agree scored 5, agree 4, no opinion 3, disagree 2, strongly disagree 1.

The responses were summed up and a total score was obtained for each respondent. The mean score was calculated and those scored above the mean and the mean score had positive attitude

and scores below the mean meant negative attitude towards prevention of mother to child transmission strategies. The highest score was expected to be 40 and the lowest score was 8.

Data analysis

Data were entered into and analyzed using the SPSS database program version 17.0. Univariate and bivariate analysis were done, univariate analysis for frequency computations and bivariate analysis in computing associations between variables.

The Chi-square test was used to measure the strength of associations between variables, a p-value of <0.05 was considered to be statistically significant.

4.8. Ethical consideration

The respondents were explained in detail about the study and they were let to decide on whether to participate or not and this ensured self-determination and autonomy. The respondents who agreed to participate gave a written consent(appendix III). The data obtained was treated privately with no name tag on it. This study caused no physical or psychological harm to the patient and they weren't exploited in any way. The respondents were treated with respects and their rights to privacy and confidentiality were observed through anonymity. After the interview respondents were given a chance to ask questions and those with poor knowledge were given the necessary knowledge about MTCT and its prevention.

Ethical clearance

The MUHAS ethical committee reviewed the proposal for ethical consideration and approval to conduct this study was given. The permission to conduct the study in Temeke was given by the District Medical Officer.

5.0. RESULTS

During the study period a total of 383 pregnant women were referred to Temeke RCHC. Three hundred and sixty met the inclusion criteria and were included in the study. Nine were removed from the study, because 2did not seem to understand at all the aim of the study or what they have been told during counseling. Six questionnaires had significant missing data that they were not analyzed and one pregnant woman was in no state of being interviewed since she had received her positive HIV results just the day before. Twenty three pregnant women were rushed to the ward since they were in critical conditions and could not be interviewed.

Figure 1: Flow chart on recruitment of women for the study

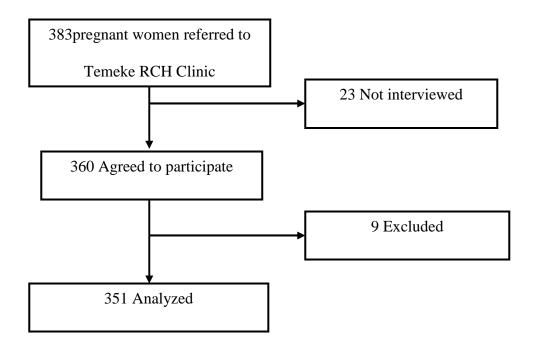


Table 1. Sociodemographic characteristics of the study population (N=351)

Table 1. Sociodemographic characterist CHARACTERISTIC	N	%
Age (yrs)		
< 20	51	14.5
20-34	250	71.2
> 35+	50	14.2
Mean 27.2 SD ± 6.3		
Education level		
No Formal Education	11	3.1
Some Primary Education	305	86.9
Above Primary Education	35	10.0
Current Marital Status		
Single	95	27.1
Married	242	68.9
Divorced/Widow	14	4.0
Formal Occupation		
Employed	26	7.4
Business	123	35.0
Housewife	178	50.0
Peasant	12	3.4
Unemployed	12	3.4
Clients HIV status		
HIV positive	114	32.5
HIV negative	237	67.5

Table 1 shows that majority of the 351(100%) interviewed clients 71.2% were in the age range of 20-34, the mean age was 27 (SD+/- 6). Majority had primary education, 305(86.9%) and more than half were married 242(68.9%).

Figure 2: Participants level of basic knowledge on HIV/AIDS (N=351)

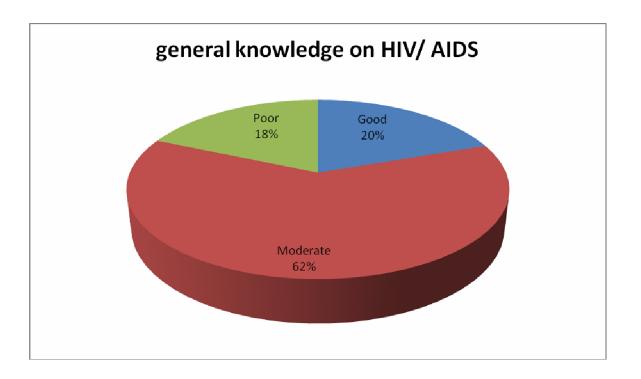


Table 2: Knowledge on when MTCT of HIV occurs (N 351)

Question	Yes (n;%)	No (n;%)
If a pregnant woman is infected with HIV Can Mother To Child Transmission occur?		, , ,
Yes	338(96.3)	13(3.7)
No	10(2.8)	341(97.2)
I don't remember	3(0.9)	348(99.1)
When does Mother To Child Transmission occur?		
Pregnancy	172(49.0)	179(51)
Vaginal delivery	299(85.2)	52(14.8)
Breastfeeding	313(89.2)	38(10.8)
I don't remember	7(2.0)	344(98.0)

Table 2 above shows that majority of the respondents (96.3%) knew that MTCT can occur but only 49.0% knew that this transmission can occur during pregnancy.

Table 3: Knowledge on when PMTCT of HIV starts (N 351)

Question	Yes (n;%)	No (n;%)
What are the ways of Preventing Mother To		
Child Transmission?		
ARV in pregnancy	280(79.8)	71(20.2)
	44(12.5)	
Caesarian delivery		307(87.5)
ARV to the newborn	150(42.7)	204/77 2)
		201(57.3)
I don't remember	42(12.0)	309(88.0)
Is there medication to reduce Mother To Child Transmission?	331(94.3)	20(5.7)
When does all HIV positive pregnant women supposed to start ARV prophylaxis?		
First trimester	45(12.8)	
		306(87.2)
Second trimester	163(46.4)	187(53.3)
Third trimester	78(22.2)	273(77.8)
I don't remember	55(15.7)	296(84.3)

Giving ARV in pregnancy was recognized as one of the preventive measures by 79.8% of the respondents. Less than half of the respondents (46.4%) recognized the second half of pregnancy as the time that positive pregnant women start prophylaxis.

Table 4: Breastfeeding knowledge and risks that increase MTCT N=(351)

14- (331)		
Question	Yes (n;%)	No (n ;%)
BF alternatives		
BF as the mother wishes	5(1.4)	346(98.6)
BF for 6m exclusively	345(98.3)	6(1.7)
Infant formula /cows milk	151(43.0)	200(57.0)
Conditions in a mother		
Low CD4	251(71.5)	100(28.5)
Cracked/bleeding nipples	314(89.5)	37(10.5)
Mastitis	67(19.1)	284(80.9)
Conditions in an infant		
Oral ulcers	325(92.6)	26(7.4)
Mixed feeding	288(82.1)	63(17.9)

Table 4 above shows 98.3% of the pregnant women were aware of breastfeeding exclusively for six months as a measure of reducing mother to child transmission and majority could identify the risks in mother and child.

Table 5: Association between socio demographic characteristics and level of knowledge of MTCT

Sociodemographic	Knowledge level				
characteristics	Good (N,%)	Moderate (N,%)	Poor (N,%)	Total (N,%)	
Age(yrs)					P=0.009
<20yrs	6(11.8)	19(37.3)	26(51.0)	51(100.0)	
20-34	35(14.0)	132(52.8)	83(33.2)	250(100.0)	
>35+	14(28.0)	24(48.0)	12(24.0)	50(100.0)	
Education Level					P=0.000
No formal education	0(0.0)	2(18.2)	9(81.8)	11(100.0)	
Some primary	40(13.1)	158(51.8)	107(35.1)	305(100.0)	
education					
Above primary	15(42.9)	15(42.9)	5(14.3)	35(100.0)	
Current Marital					P=0.027
Status					
Single	11(11.6)	38(40.0)	46(48.4)	95(100.0)	
Married	42(17.8)	127(51.3)	73(30.9)	242(100.0)	
Divorced/widow	2(20.0)	10(70.0)	2(10.0)	14(100.0)	
Formal Occupation					
Employed	12(46.2)	10(38.5)	4(15.4)	26(100)	P=0.000
Bussiness	16(13.0)	66(53.7)	41(33.3)	123(100)	1 -0.000
Housewife	25(14.0)	92(51.7)	61(50.0)	178(100)	
Peasant	1(8.3)	5(41.7)	6(50.0)	12(100)	
unemployed	1(8.8)	2(16.7)	9(75.0)	12(100)	

Table 5 above, shows that the knowledge on mother to child transmission was higher with a higher level of education, and in those employed or business women with a statistical significant (p<0.005).

Table 6: Participants responses on attitude questions

	Resp			
Question			No opinion (N, %)	Total (N, %)
	Agree (N, %)	Disagree (N, %)		
Do you think it is important that every pregnant woman gets tested for HIV?	349 (99.4)	2 (0.6)	0(0)	351 (100)
Once you are HIV positive, you should not get pregnant.	206 (58.7)	118 (33.6)	27 (7.7	351 (100)
Using protective gears (condoms) in pregnance/BF reduces MTCT.	166 (47.3)	101 (28.8)	84 (23.9)	351 (100)
Some women BF beyond 6m due to fear of stigma.	301 (85.8)	46 (13.1)	4 (1.1)	351(100)
Some women BF beyond 6m due to fear of disclosure	339(96.6)	3 (0.8)	9(2.6)	351 (100)
Some women BF beyond 6m due to lack of education	291 (82.9)	20 (5.7)	39 (11.1)	351 (100)
I think my family will support me on the choice of feeding the baby (HIV +)	56 (48.7)	59 (51.3)	0(0%)	* 114(100)
Do you support National PMTCT interventions?	351(100)	0(0%)	0(0%)	351(100)

^{*} Includes only HIV positive respondents.

Almost all pregnant mothers knew the importance of pregnant women to be tested but only 33% responded that HIV+ women can have children.

Fear of stigma and disclosing results were identified as reasons for breastfeed beyond 6months. A few felt that they will have family support on their choice of feeding the baby and all respondents supported the National PMTCT interventions

6.0. DISCUSSION

In this study knowledge and attitude towards PMTCT strategies were identified. It was found that four fifth of the women were found to have moderate to good basic knowledge about HIV/AIDS. This finding is in contrast with findings in a study done in rural Nigeria where all women had adequate knowledge²¹. This difference can be explained by the fact that majority of the study participants had a primary level of education and those in Nigeria had secondary and college education.

In this study majority of the participants were aware of the possibility of an infected pregnant woman transmitting infection to her unborn child. This may be contributed by the National sensitization on HIV/AIDS through public media such as magazines, radios and television shows as well as counseling during antenatal visits. This appears to be similar to a study done in Uganda and southern Tanzania by Gundel Harms and others in 2009 which showed that in southern Tanzania seven percent of the pregnant women were not aware of the possibility of an infected mother transmitting the infection to her child. Similar to this study only 3.7% percent of the women were not aware of this possibility.

Despite this knowledge, less than half of the respondents recognized transmission during pregnancy, majority mentioning vaginal delivery and breast feeding as the time when MTCT occurs. During post test counseling of pregnant women essential messages about PMTCT are stressed to both HIV positive and HIV negative women and therefore mothers have to be equiped with this knowledge.²⁰ In rural Nigeria more than half of the pregnant women

recognized pregnancy as the time during which MTCT occurs. This may show that more public sensitization is needed or more counseling sessions for pregnant women.

However over three quaters of respondents in this study were aware of use of ARVs during pregnancy as a preventive measure compared to less than a quater in the Nigerian study¹². This is a positive finding because knowing that there are ways to prevent the unborn child may help mothers to seek antenatal services early.

Studies have shown that most women attend ANC at least once during pregnancy. It was found in this study that less than half of the respondents mentioned the second trimester as the appropriate time for ARV prophylaxis. Emphasising the need for pregnant women to attend ANC early is mandatory in this case so as to identify those infected and eligible for ARV therapy or prophylaxis. Currently HIV infected women start ARV prophylaxis as ealy as fourteen weeks of pregnancy and they continue up to one year of breastfeeding.

It was found in this study that majority of the women were aware of breast feeding exclusevely for 6months as the means of reducing MTCT. Low CD4 counts, bleeding cracked nipples and infants oral ulcers were identified as the risks that increases MTCT during breast feeding. This positive finding which may help reduce MTCT during breastfeeding shows that there is good and effective counseling. Leshabari et al showed that mothers once given the correct information coupled with broucheres to remind them about the recommended infant feeding, only a few will refrain from what they have been taught. ¹⁶

The study identified the level of education; occupation and age as being significantly associated with level of knowledge and attitude on MTCT. Similar findings have been reported in several studies in Africa. ^{18, 20} This may be contributed by the fact that women 20yrs and older are more exposed to different sources of information and community perceptions of pregnancies at a young age making it difficult for pregnant teenagers to get the necessary information or attend ANC for counseling. It was also found that the higher the education level the higher the level of knowledge. This can also explain the high knowledge in those employed or business women since these go hand in hand. Exposure to sources of information like news papers, interacting with different people and attending various seminars may explain this knowledge. Marital status proved not to have a relationship with level of knowledge on PMTCT. ^{18, 20}

The study revealed that HIV positive pregnant women are two times more knowledgeable than HIV negative women. This may be due to the fact that being HIV positive raises concerns about ones health and that of the unborn child. Also during counseling HIV positive pregnant women are given additional information on ARV prophylaxis, infant feeding issues, disclosure and partner testing. ²¹

The attitude a person has on something may affect the interest of that person knowing or utilizing it. Most of the pregnant women felt that it was important for pregnant women to be tested for HIV and a few did not see the importance of knowing. The reason for this may be fear of being stigmatized by the community. It was also found in Uganda that pregnant women felt that knowing their HIV status is a terrible thing.²⁰

More than half of the study participants responded that an HIV infected woman can get pregnant and have children. This shows that they are coupled with the knowledge that there are interventions to prevent MTCT even in already infected women. It was found in Uganda that most women felt that having a baby while you are infected with HIV will reduce your already numbered days to live and you will have an HIV infected baby. The knowledge on preventing oneself from acquiring HIV infection during pregnancy and breastfeeding (condom use) was low in this study population. This is similar to a study done by Leshabari et al which showed that (40% vs. 47% in the present study) of the nursing women reported to practice safer sex. ¹⁸

The study revealed that stigma and fear of disclosing results may be barriers to implement the recommended period of exclusive breastfeeding and some women have fears of not being supported on the mode of breastfeeding they choose. Hopefully with the new PMTCT guideline where breastfeeding is allowed to continue for up to 12months the fear of stigma can be reduced. ²¹ All the women in this study supported the PMTCT strategies.

CONCLUSION

The study reveled that only one fifth of the pregnant women have good general knowledge on HIV/AIDS. It also showed that even after counseling still the knowledge on the important aspects of MTCT and its prevention is not adequate enough. The knowledge on when MTCT occurs, the availability of preventive measures and when to start ARV prophylaxis is important as this may help women to attend clinics early for early intervention. It is a positive and encouraging finding that women have a positive attitude towards PMTC interventions.

Therefore it is important to counsel pregnant women thoroughly and adequately so they can have this very useful information to prevent mother to child transmission in their present as well as future pregnancies.

RECOMMENDATIONS

Temeke district has done well in PMTCTservices, however there is a need to do a qualitative study to find out if the information given during counselling is enough and useful to pregnant women and to see if more counseling sessions are needed for pregnant women during antenatal visits.

Men involvement is neccesary and they need to be encouraged and sensitized from the communities to accompany their partners to the clinic and attend counseling sessions, this will help equip them both with the neccessary information on PMTCT.

REFERENCES

- 1. UNAIDS. Report on global AIDS epidemic: UNAIDS; 2010.
- 2. Dabis, F; (1995), "Rate of Mother To Child Transmission of HIV 1 in Africa, America and Europe, results from perinatal studies)". *J. Acquired Immune Deficiency Syndrome* 1995; 8(5); 34-38.
- 3. De Cock KM, MG Fowler, Mercier E. de Vincenzi I, Saba J, Hoff E, et al. "Prevention of mother-to-child HIV transmission in resource-poor countries: Translating research into policy and practice." *JAMA* 2000; 283:1175-82.
- 4. Ministry of Health Tanzania Mainland; update on HIV/AIDS; 2003.
- 5. Tanzania National PMTCT guidelines; Ministry of Health and Social Welfare; 2007.
- Catania, J., D. Gibson, D. Chitwood, et al; Methodological problems in AIDS behavior Research. Influences on Measurement error and participation biasin studies of sexual behavior. Psychology Bulletin 108: 339-362, 199
- 7. Marten, T E and Burton A. Global programme on Acquired Immunodeficiency Syndrome. Geneva: WHO; 2006.
- 8. UNAIDS/WHO. AIDS Epidemic Update. Geneva: UNAIDS/WHO; 2008.
- Risby J, Lindsay M. The effectiveness of HIV counseling on retention of knowledge in Inner –City prenatal population. *AM Journal of Obstetrics and gynecology*; 1995; 172:307.
- 10. Creek T, Ntuny R, Mazhan L, Galavotti C, Moore J, Smith M, et al, "Knowledge, attitude and practices regarding PMTCT of HIV among antenatal and postnatal women, Botswana; International Conference on AIDS; 2004; Bangkok, Thailand.
- 11. Ekaneem EE, Gbadegesin A, "Voluntary counseling and testing for Human Immunodeficiency Virus; a study on acceptability by Nigerian women attending clinics." *African Journal of Reproductive Health*; 2007; 11(1); 57-66.

- 12. Moses O, Munir'deen A, Peter A, Awareness and Knowledge of MTCT of HIV among pregnant women attending a federal medical center in Nigeria. *Journal of National Medical Association*; 2007; 99 (7); 758-763.
- 13. Palzer K, Mosala T, Nqeketo A, Mngqundaniso N,Shisana O. Barriers to prevention of HIV transmission from mother to child in a resource poor setting in Eastern Cape, Southern Africa. *Africa Journal of Reproductive Health*, 2007; vol III, no.I.
- Delva W, Mutunga L, Quaghebeur A, Temmerman M. "Quality and quantity of antenatal HIV counseling in PMTCT in Mombasa, Kenya. AIDS care 2006; 18(3):189-930.
- 15. Schwarendruber A, Msamanga G. Evaluation of the UNICEF-Sponsored PMTCT Pilot Project in Tanzania; 2000.
- 16. Ngarina M, Kilewo C, Mpembeni R. "Acceptance of counseling, voluntary HIV testing and use of prophylactic Nevirapine in labour and immediate postpartum at MNH, Tanzania; *Tanzania Medical Journal*; 2009; 21,1:1-5.
- 17. Kilewo C, Massawe A, Lyamuya E, Semali I. "Counselling and testing of pregnant women in sub-Saharan Africa. Experience from a study on PMTCT-1 in Dar-Es-Salaam, Tanzania. JAIDS; 2001;28:458-462(Experience from Petra trial)
- 18. Leshabari, S, Koniz-Booher P, Burkhalter B, K. Hoffman M, Jennings L; Testing a PMTCT infant feeding counseling programme in Tanzania; 2005; *Journal of American Medical Association*.
- 19. Gundel H, Katja S, Ilaria M, Chris B, Paulina M et al. Analyzing awareness and knowledge of Mother to Child Transmission and its prevention in Uganda and Tanzania; 2009.
- 20. Katushabe, J. Knowledge and Attitude of Pregnant women on the use of prevention of Mother- To – Child transmission of HIV (PMTCT) services in Mbale regional hospital ANC; 2007.

- 21. Summary of WHO PMTCT and breastfeeding Guidelines 2010.
- 22. MoH. Prevention of Mother To Child Transmission; Participants manual; 2007 unit 4, 4-15.
- 23. MoH annual report on HIV/AIDS; Temeke district; October to December 2009.

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APPENDICES

Appendix I

Bloom's original cut points; 75-100%, good knowledge, 50-74% moderate knowledge, less

50% poor knowledge.

Appendix II

QUESTIONNAIRE (English Version)

Introduction

I am a post graduate student at MUHAS doing a research on PMTCT, knowledge of

pregnant women on HIV/AIDS transmission, risk behaviours, MTCT and their attitude

towards different options on PMTCT. We understand that you have received counselling and

testing and we would like to ask you a few questions concerning that.

Interviewer: circle the selected answer(s).Do not read responses.

PART I.

Sociodemographic data

HIV status.....

1. Age..... (Exact age)

2. Marital status

a. Single

b. Married

c. Divorced

c. Primary completed
d. Secondary not completed
e. Secondary completed
f. Tertiary education
4. Current occupation
a. Employed
b. Bussiness
c. Housewife
d. Peasant
e. Unemployed
PART II
BASIC KNOWLEDGE QUESTIONS
5. Do you know how HIV is transmitted?
a. Yes
b. No

d. Cohabiting.

e. Widow

f. Separated

3. Level of education

a. No formal education

b. Primary not completed

If	no	skip	a	uestion	6.

- 6. Mention ways of transmission of HIV (tick where appropriate)
- a. Unsafe blood transfusion
- b. Sharing sharps with an infected person
- c. Mother to child transmission.
- d. Unprotected sexual intercourse.
- 7. Do you know the risks of acquiring HIV?
- a. Yes
- b.No

If no skip question 8.

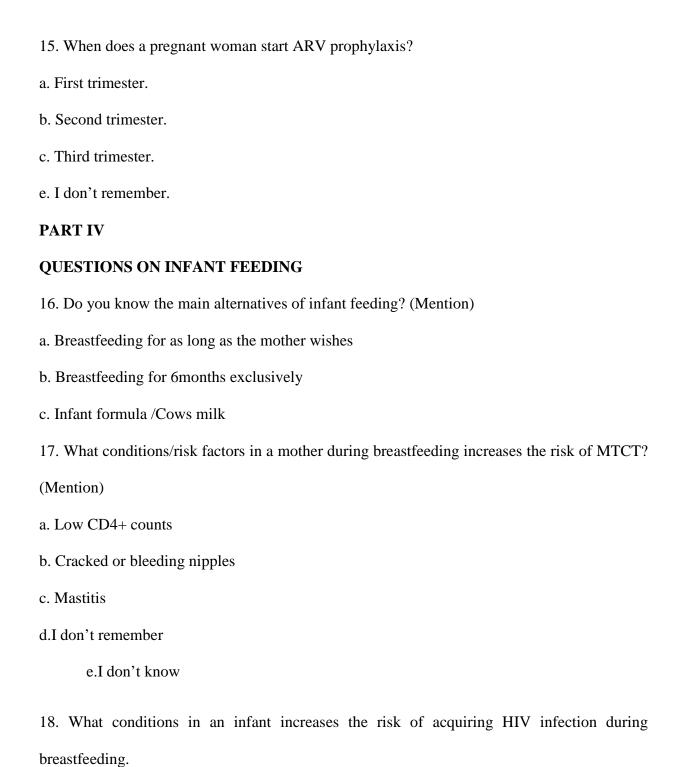
- 8 .Mention the risks of acquiring HIV infection
- a. Unprotected sexual intercourse with an infected person
- b. Multiple sexual partners.
- c. Having sexually transmitted infections.
- 9. Can you mention ways of preventing someone from acquiring HIV? (Tick where appropriate)
- a. Abstinence.
- b. Having one faithful sexual partner.
- c. Condom use.
- 10. Can a healthy looking individual be infected with HIV?
- a. Yes

b. No

PART III

c.I don't remember

QUESTIONS ON MTCT
11. Can an infected mother transmit HIV virus to her child?
a. Yes
b. No
c. I don't know
If no skip question 12
12. When does an infected mother transmit the infection to her child?
a. During pregnancy
b. Through vaginal delivery
c. Through breastfeeding
13. How can mother to child transmission of HIV be prevented?
a. Antiretroviral therapy during pregnancy.
b. Delivery by caesarean section.
c. Giving antiretroviral drugs to the newborn.
14. Is there medication given to the mother during pregnancy to reduce MTCT?
a.Yes
b.No



a. Oral ulcers or sores in the infant's mouth
b. Mixed feeding.
c. I don't remember
d. I don't know
PART V
QUESTIONS ON ATTITUDE TOWARDS PMTCT
19. Its important that every pregnant woman gets tested for HIV.
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1 Strongly disagree
20. If one is infected with HIV then she should not get pregnant again
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1 Strongly disagre
21. Using protective gears (condoms) during pregnancy and breastfeeding reduces MTCT?5. Strongly agree
J. Dirollety agree

4. Agree
3. No opinion
2. Disagree
1 Strongly disagree
22 .Some women opt to breastfeed despite their HIV status due to stigma.
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1. Strongly disagree
23. Some women opt to breastfeed despite their HIV status due to poverty.
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1. Strongly disagree
24. Some women opt to breastfeed despite their HIV status due to fear of disclosure.
5. Strongly agree
4. Agree
3. No opinion

2. Disagree
1. Strongly disagree
25. Some women opt to breastfeed despite their HIV status due to lack of education.
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1. Strongly disagree.
26. My family will support my choice of feeding the baby
5. Strongly agree
4. Agree
3. No opinion
2. Disagree
1. Strongly disagree
27. Do you support the strategies for PMTCT?
5. Agree
4. Strongly agree
3. No opinion
2. Disagre
1. Strongly disagree

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QUESTIONNAIRE (Swahili Version)

Utangulizi

Mimi ni mwanafunzi wa chuo kikuu cha sayansi na tiba cha Muhimbili (MUHAS). Nafanya

utafiti wa uelewa na mtazamo wa wanawake wajawazito katika suala la kuzuia maambukizi

ya ukimwi kutoka kwa mama kwenda kwa mtoto katika kliniki ya wajawazito katika hospitali

ya Temeke Dar Es Salaam. Ninatambua kuwa umepewa ushauri nasaha kuhusu hilo na

ningependa kukuuliza maswali machache kuhusiana na hilo.

Msaini : Zungushia jibu linalohusika usitaje majibu.

SEHEMU YA KWANZA

Hali ya maambukizi ya virusi vya ukimwi.....

1: Umri.....(Miaka kamili)

2: Hali ya mahusiano.

a. Sijaolewa

b. Nimeolewa

c. Nimeachika

d. Ninaishi na mwanaume bila ndoa

e. Nimefiwa na mum

f. Tumetengana

3. Kiwango cha elimu

a. Sina elimu rasmi

b. Sikumaliza elimu ya msingi

- c. Nimemaliza elimu ya msingi
- d. Sikumaliza elimu ya sekondary
- e. Nimemaliza elimu ya sekondari
- f. Elimu ya chuo
- 4. Unafanya kazi gani?
- a. Nimejiajiri
- b. Mfanyabiashara
- c. Mama wa nyumbani
- d. Mkulima
- e. sina kazi kwa sasa

SEHEMU YA PILI

MASWALI YA UELEWA WA UKIMWI

- 5. Unajua virusi vya ukimwi vinavyoambukizwa?
- a. Ndio
- b. Hapana

Kama hapana nenda swali la 6.

- 6. Taja njia za maambulizi ya ukimwi.
- a. Kuongezewa damu isiyo salama
- b. Kuchangia vitu vyenye ncha kali
- c. Maambukizi kutoka kwa mama mjamzito kwenda kwa mtoto
- d. Ngono zembe

/. Unajua tabia hatarishi za kupata maambukizi ?
a. Ndio
b. Hapana
Kama hapana nenda swali la 8.
8. Taja tabia hatarishi za kupata maambukizi ya ukimwi?
a. Ngono zembe
b. Kuwa na wapenzi wengi
c. Kuwa na magonjwa ya zinaa
9. Wawezaje kujikinga na maambukizi?
a.Kutokufanya ngono kabisa
b.Kuwa na mpenzi mmoja mwaminifu.
c. Kutumia mipira ya kiume au kike
10. Je, mtu aonekanaye mwenye afya aweza kuwa na maambukizi ?
a. Ndio
b. Hapana
SEHEMU YA TATU
MASWALI KUHUSU MAAMBUKIZI TOKA KWA MAMA KWENDA KWA MTOTO
11. Mama mjamzito aweza kumwambukiza mtoto ?
a . Ndio
b. Hapana

c. Sijui
Kama hapana nenda swali la 12.
12.Maambukizi hutokea wakati gani?
a. Ujauzito
b. Kujifungua
c. Kunyonyesha
13.Maambukizi haya huzuiwaje?
a. Matumizi ya dawa za kupunguza makali ya ukimwi wakati wa ujauzito
b. Kujifungua kwa upasuaji
c.Matumizi ya dawa za kupunguza makali ya ukimwi kwa mtoto
14. Unajua kama kuna dawa za kupunguza makali ya maambukizi?
a.Ndio
b.Hapana
15.Ni wakati gani mama mjamzito huanza matumizi ya dawa za kurefusha maisha kama
kinga?
a. Miezi mitatu ya kwanza
b.Miezi mitatu ya kati
c. Miezi mitatu ya mwisho ya mimba
d. Sijui

SEHEMU YA NNE

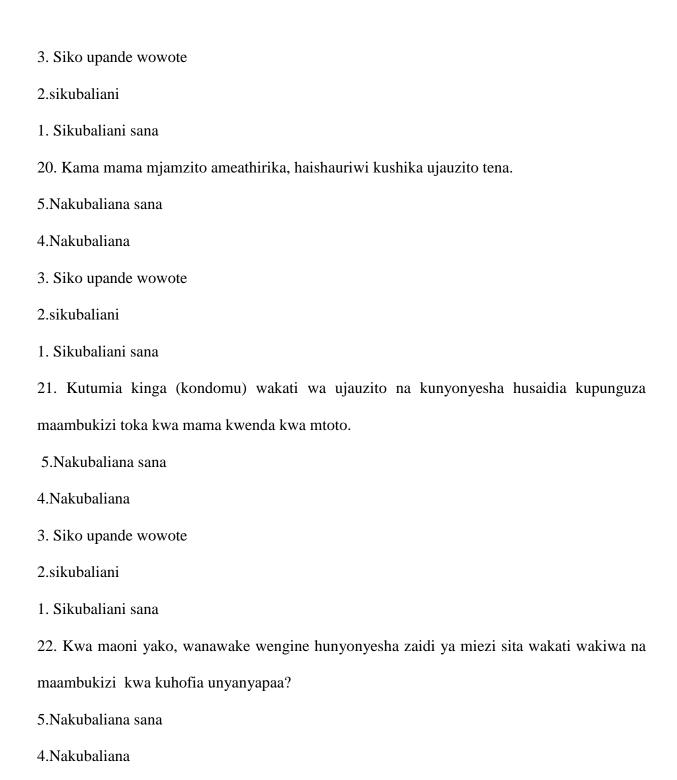
MASWALI KUHUSU KUMLISHA MTOTO

- 16. Ni njia zipi za kumlisha mtoto? Taja.
- a.Kumnyonyesha mtoto mama apendavyo
- b. Kumnyonyesha mtoto kwa miezi sita ya mwanzo
- c. Maziwa ya kopo/ maziwa ya ng'ombe.
- 17. Ni dalili zipi kwa mama huongeza maambukizi wakati wa kunyonyesha?
- a.Kupungua kwa kinga za mwili
- b. Chuchu zilizo chubuka
- c. Magonjwa ya matiti
- d. Sikumbuki.
- 18. Ni dalili zipi kwa mtoto huongeza maambukizi wakati wa kunyonya?
- a. vidonda mdomoni
- b. Vyakula mchanganyi
- c. Sikumbuki
- b. Sijui

SEHEMU YA TANO

MASWALI KUHUSU MTAZAMO WA KUZUIA MAAMBUKIZI KWA MTOTO

- 19. Ni muhimu kwa kila mama mjamzito kupima maambukizi ya ukimwi.
- 5.Nakubaliana sana
- 4.Nakubaliana



3. Siko upande wowote

- 2. Sikubaliani
- 1. Sikubaliani sana
- 23. Kwa maoni yako, wanawake wengine hunyonyesha zaidi ya miezi sita wakati wakiwa na maambukizi kwa sababu ya ukosefu wa uelewa.
- 5.Nakubali sana
- 4.Nakubaliana
- 3. Siko upande wowote
- 2.sikubaliani
- 1. Sikubaliani sana
- 24. Kwa maoni yako, wanawake wengine hunyonyesha wakati wakiwa na maambukizi kwa kuhofia kuwambia majibu wenzi wao?
- 5.Nakubaliana sana
- 4.Nakubaliana
- 3. Siko upande wowote
- 2. Sikubaliani
- 1. Sikubaliani sana
- 25. Familia yako itakupa ushirikiano kwa njia yoyote utakayo chagua kumlisha mtoto.
- 5.Nakubaliana sana
- 1. 4.Nakubaliana
- 3. Siko upande wowote

2. Sikubaliani
3.Sikubaliani sana
26. Unakubaliana na njia za kuzuia maambukizi toka kwa mama kwenda kwa mtoto?
5.Nakubaliana
4.Nakubaliana

- 2.sikubaliani
- 1. Sikubaliani sana.

3. Siko upande wowote

Appendix III

CONSENT FORM FOR PARTICIPATION IN A STUDY (English version)

KNOWLEDGE AND ATTITUDE ON PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV AMONG PREGNANT WOMEN ATTENDING REPRODUCTIVE AND CHILD HEALTH CLINIC AT TEMEKE DISTRICT HOSPITAL IN DAR ES SALAAM.

To the Client (pregnant woman)

Foreword

I am Dr. Nyasinde Mujumali a postgraduate student at MUHAS conducting a study on knowledge and attitude on prevention of mother to child transmission of HIV among pregnant women attending Reproductive and Child Health clinic at Temeke district hospital in Dar Es Salaam.

How to participate

The interview will be conducted between the investigator and the pregnant woman about social demographic factors, basic knowledge on HIV/AIDS, infant feeding options, risks of transmission of HIV from mother to child.

The evaluation is not compulsory, meaning that any pregnant woman is free to accept or refuse to be involved in the study without affecting the activities. If any woman during interview is found not to know anything about the study she is going to be educated.

Purpose of the Study

The study will help us to know whether mothers retain the information they are given during counseling and their attitudes towards PMTCT options.

The study has the permission from Muhimbili University (MUHAS)'s ethical committee.

Risks

The study will not cause any harm to the pregnant women.

Consent

I have read and understood the explanation of the study. I accept to be examined and participate in the study.

Signature	of the	participant	•
Date			

For more information or clarification you may contact one of the Doctors mentioned below.

Dr. Nyasinde Mujumali 0787 000400

Prof. E. Lyamuya, Research chairperson. Phone number 2150302-

FOMU YA RIDHAA YA KUSHIRIKI KATIKA UTAFITI

Kichwa cha Habari: Uhakiki wa uelewa na mtazamo wa wanawake wajawazito katika suala la kuzuia maambukizi ya ukimwi kutoka kwa mama kwenda kwa mtoto katika kliniki ya wajawazito katika hospitali ya Temeke Dar Es Salam.

Kwa Mama mjamzito

Utangulizi

Mimi Dr Nyasinde Mujumali mwanafunzi wa udhamili Chuo Kikuu cha Sayansi za Afya ya Muhimbili nafanya tathmini ya hiari ya Uhakiki wa uelewa na mtazamo wa wanawake wajawazito katika suala la kuzuia maambukizi ya ukimwi kutoka kwa mama kwenda kwa mtoto katika kliniki ya wajawazito katika hospitali ya Temeke Dar Es Salam.

Taratibu za kushiriki

Wajawazito wanaohudhuria kliniki ya wajawazito wataombwa ridhaa ya mahojiano na wahusika wa utafiti. Wataulizwa maswali kuhusu uelewa wao kuhusu maambukizi ya virusi vya ukimwi na mtazamo wao kuhusu mikakati iliyowekwa kuzuia maambukizi ya ukimwi kutoka kwa mama kwenda kwa mtoto.

Wataulizwa pia kuhusu tabia hatarishi, dalili za hatari kwa wajawazito na vitu hatari viongezavyo maambukizi wakati wa ujauzito, uchungu na kujifungua na wakati wa kunyonyesha. Mahojiano yanakadiriwa kuchukua si zaidi ya dakika kumi kwa kila mmoja.

Tathmini hii ni ya hiari kabisa, kila mjamzito ana hiari ya kukataa au kukubali, na hii haitaathiri huduma anazopatiwa katika hospitali ya Temeke.

Mshiriki atakayeonekana kutokuwa na elimu kuhusu swala hili ataelimishwa.

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Dhumuni la Utafiti

Utafiti huu utawezesha kujua kama wanawake wajawazito wanauelewa wa kile

wanachofundishwa kuhusu kuzuia maambukizi ya ukimwi kutoka kwa mama kwenda kwa

mtoto na mtazamo wao kuhusu jambo hili.

Utafiti huu umepata kibali kutoka kwa kamati ya jopo la madaktari wa Chuo kikuu cha Tiba

cha Muhimbili.

Hatari

Utafiti huu hautasababisha madhara yoyote kiafya kwa washiriki.

Ridhaa ya makubaliano / kukubali

Nimesoma na kuelewa maelezo kuhusu utafiti huu. Nakubali kushiriki katika utafiti huu.

Sahihi ya mshiriki.....

Tarehe.....

Kwa ufafanuzi au maelezo zaidi waweza kuwasiliana na mmoja kati ya madaktari wafuatao.

Dr. Nyasinde Mujumali, simu namba 0787 000 400.

Prof. E. Lyamuya, Mwenyekiti wa kamati ya utafiti. Simu namba 2150302-6