

*Full Length Research Paper*

# Motivating factors for expectant mothers undergoing regular HIV testing and counselling during antenatal clinics at Dedza District hospital in Malawi

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A study was conducted to explore factors that influence pregnant women to undergo routine HIV testing and counselling during antenatal clinics at Dedza District hospital in Malawi. The study design was descriptive and utilized qualitative data collection and analysis method. Twelve HIV positive women aged between 15 and 49 years were purposively sampled during antenatal clinic and were interviewed using an open ended questionnaire. Qualitative data was manually analysed using thematic content analysis and the resultant themes are reported as results. Results show that the majority of the women decided to undertake HIV testing while they were at home prior to visiting the antenatal clinic. Most women wanted to know their HIV status because they wanted to access PMTCT services if they tested HIV positive. Results show that the desire to protect the unborn babies and to access HIV treatment and care was the main reason that most women opted for HIV testing. In addition, some women opted for the test because they did not know about their right to opt out of the test. However, all women felt that they made the right decision to get tested voluntarily and that the time between counselling and the decision to opt in or out of the test was adequate. Results further show that the PMTCT coverage is high but there is a need for the service providers to adhere to mandatory HIV testing and counselling guidelines, so that quality services are provided. There is also a need to create awareness among the communities so that the pregnant women make informed decision when opting for HIV testing and counselling during antenatal clinics.

**Keywords:** Routine HIV testing and counselling, PMTCT, HIV/AIDS, opt in and opt out of HIV testing and counselling.

## INTRODUCTION

Globally approximately 33 million people live with HIV

### List of Abbreviations

ANC, Antenatal Care; ART, Antiretroviral Therapy; COMREC, College of Medicine Research and Ethics Committee; HAART, Highly Active Antiretroviral Therapy; HIV, Human Immunodeficiency Virus; PMTCT, Prevention of Mother to Child Prevention; VCT, Voluntary Counselling and Testing.

and of these about 50% are women (UNAIDS, 2009). Sub Saharan Africa alone accounts for 67% of the people living with HIV (UNAIDS, 2009) and the majority (61%) are women (Eyakudze et al., 2008). Malawi is one of the ten countries with the highest HIV prevalence in the world estimated at 10.6% among adults aged 15-49 years (NSO, 2011). Mother to child transmission accounts for about 10 % of all new infections (Muheriwa et al., 2012) and more than 90 percent of all HIV infections in infants and children are parentally acquired (UNAIDS 2009). HIV testing and counselling provides a primary route of preventing new HIV infections and is an entry point to

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HIV services including Prevention of Mother to Child Transmission (PMTCT). Access to quality HIV testing and counselling services during antenatal clinic is therefore essential for an effective global response to HIV/AIDS (Jurgens, 2007).

Voluntary HIV counselling and testing (VTC) has received a low response in Malawi from the general public. Similarly the coverage of antenatal HIV testing in Malawi which was voluntary (opt in testing or client initiated testing) is also very low. Consequently, a small percentage of people benefit from the Highly Active Antiretroviral Therapy (HAART) (Collin, 2006). The Malawi government introduced routine HIV testing with an option to opt out during antenatal clinics as one way of expanding the coverage (Collin, 2006). Initially, as a way of PMTCT of HIV, pregnant women who tested HIV positive during antenatal clinics and had lower than 200 CD4 count were initiated on ART (Sherr et al., 2006). However, from June, 2011, the Malawi government adopted option B<sup>+</sup> of PMTCT in which all HIV positive pregnant women are initiated on ART regardless of CD4 count.

The number of pregnant women tested during antenatal clinics in Malawi between 2004 and 2010 has increased from 13 to 72% (NSO, 2011). These figures show that the country is making a steady progress on PMTCT of HIV. However, the factors that influence the women to opt for testing during the ANC are unknown. The aim of the study was therefore to explore the factors that influence pregnant women to undergo routine HIV testing and counselling during antenatal clinic in Malawi.

## METHODOLOGY

### Design

The research design was descriptive and utilized qualitative data collection and analysis method. A semi-structured interview guide was used to collect data using in depth interviews with pregnant women that passed through routine opt out HIV testing and counselling during ANC and consented to participate in the study.

### Setting

The study was conducted at the antenatal clinic of Dedza district hospital in the Central Region of Malawi. The district has a population of approximately 671, 137 of which 154, 362 are women of child bearing age (NSO, 2011). The site was chosen because of its high prevalence rate of HIV, which at 11.3% is above the national average of 10.6% (NSO, 2011). The health facility offers antenatal services, PMTCT services, and provides counselling and testing services through routine HIV testing and counselling.

## Sample

Data saturation was attained after recruiting 12 married HIV positive antenatal mothers who tested positive during routine opt out HIV testing and counselling. The women were purposively sampled to recruit participants that met the inclusion criteria of the study. All the 12 participants had come for their scheduled subsequent antenatal visit after the initial visit where they were informed of their positive HIV status.

## Inclusion and Exclusion Criteria

The study recruited women who were; pregnant, married, newly diagnosed during ANC and were HIV positive, aged between 15 to 49 and able to communicate in English or vernacular language. Women who tested HIV negative, were not newly diagnosed HIV positive and not able to communicate in vernacular or English, were single or below 15 years or above 49 years were excluded from the study.

## Ethical Consideration

The study was approved by the College of Medicine Research and Ethics Committee (COMREC) and permission to conduct the study at the facility was obtained from the District Health Officer of Dedza district hospital. Participants who were interviewed gave an informed consent and were told that they were free to withdraw from the study at any point should they wish to do so. All other ethical issues such as maintaining confidentiality and avoiding harm were strictly observed. Anonymity was achieved through the use of codes instead of names to identify the participants. The data was kept in locked drawers and the computers with the data are protected by password. Both the drawers and computers are accessible by the researchers only.

## Data Collection

Data was collected in 2011 between August and September. In depth interviews were conducted using an open ended interview guide. The interviews were conducted in a private room to ensure privacy and confidentiality and the discussions were recorded using a digital recorder. Consent was obtained to audiotape the interview before the initiation of the interview. Field notes were taken to complement the audio interviews.

## Data Analysis

Data analysis was done simultaneously with data

collection to enable refining the interview guide content as new information emerged. Data was transcribed verbatim, translated and then analyzed according to Collaizzi's seven steps (Collaizzi, 1978). Resultant theme and sub themes are presented as results. To ensure credibility, dependability, confirmability and transferability of the results, the study was conducted according to standards recommended by Speziale and Carpenter (2007).

## RESULTS

The ages of women in this study ranged from 25 to 37 years, with the majority (33%) being 35 years old. Most (41.6%) of the women had attained primary and secondary education and only 16.7% had no formal education.

One theme emerged from the participants' narrations and was the decision process to participate in HIV testing. A total of 4 sub themes emerged, which were; prior decision, motivating factors, knowledge regarding opting out, and satisfaction with the time provided before deciding to take the test.

### Prior decision before testing

Majority of the participants (8) had already decided to under-go HIV testing when they started ANC. They made this decision because they heard from their friends who previously attended ANC that these days every woman who presents herself at ANC was under-going HIV testing. The information they received seemed to imply that it was mandatory to be tested for HIV during ANC without the option to opt out. This point was shared by participant #9.

*"I was already aware that these days when one starts antenatal care she is also tested for HIV. So I was already aware when I went to ANC that whether I had a choice or not I would be tested for HIV."*

For some participants (5), they made a prior decision to be tested because the testing accorded them an opportunity to know their HIV status. *"I was ready to be tested for HIV because I often became sick, so I wanted to know my HIV status."* Participant # 7.

Some participants (4) however, did not plan to get tested during ANC. Their narrations indicated that they presented themselves for the test because the health workers told them that they had to be tested. Participant # 3 explained; *"I forced myself to take the test. I did not want to be tested but I had to do it because it was a requirement for the ANC and that is why I had to do it."*

### Motivating factors towards HIV testing

Most of the participants (10) were motivated to take an HIV test in order to know their HIV status. The participants regarded knowledge about their HIV status to be very important for the protection of their unborn babies, especially if the results were positive.

*"I accepted to be tested because I wanted to know more about my life. I was also interested to know how I can protect my unborn baby. Now I am on a PMTCT program because I tested positive and I have to protect my baby."*

For some participants (3), frequent sickness was a motivation factor to get tested as explained by participant #1.

*"I was becoming sick very often and I suspected that I could be HIV positive. So the HIV testing during ANC gave me an opportunity to know my actual status and stop living in suspicion."*

Some participants (4) were motivated by the health workers to take an HIV test during ANC. When the pregnant women arrived at the ANC the health service providers advised them to get tested because they would know their status and get counselled on how to protect their babies. They understood the advice and opted for an HIV test as explained by participant #11. *"I was advised by the nurse on the advantages of knowing my status, so I got tested."*

Some participants (4) however, explained that they opted for the test because they were told that they should be tested first before participating in ANC programs and activities. *"The nurse on duty told me that it was necessary that I first get tested before undergoing any examination. So I just succumbed and got tested."* – Participant #7.

### Opt out knowledge

Six of the participants were aware of the possibility to opt out of the HIV test but still opted for the test due to the perceived benefits of knowing their HIV status.

*"I knew that there was a possibility for me not to get tested and that it was my right to reject getting tested, but I chose to get tested and the nurse did not force me, it was my choice."* - Participant #5.

The other half of the participants (6) were not aware of the possibility to opt out of the test. Results show that the opportunity to opt out of the test was not emphasized by the providers during health talks and was not included during information sessions. However the participants said that even if they had known about the opt-out option, they would still have chosen to get tested to know their

status and, to know how to protect their babies.

*"I did not know that I had a choice not to get tested, however, I was going to get tested anyway because I was keen to know about my status and how to protect my unborn baby." – Participant # 10.*

### **Adequacy of time for deciding to go for a test**

The majority of the participants (8) explained that the time provided for them to make a decision about getting tested was adequate. These participants were the ones that knew in advance that they were going to be tested when they initiated ANC.

*"The time for me to decide about taking the test was enough. Ah it's because I knew in advance that when I start ANC I will be tested for HIV." Participant # 9.*

Some participants explained that though the time was adequate they could have preferred to go back home to discuss the issue with their husbands first and then come back to get tested together with their husbands. This point was raised by participant #12.

*"Aah, there was enough time to decide whether to get tested or not. But maybe I should have been given a chance to go back home and come again so I could bring my husband with me and get tested together. All the same for someone who wanted to participate in ANC, the time was enough to make a decision."*

A few participants (2) however, felt that the time provided was not adequate for one to make a decision and that there was a need for more time. Participant #10 narrated as follows; *"No, the time was not enough. They just talked, informing us about the test and immediately they asked us to go and get tested. It could have been best if we were given some time after the information so that we could make a decision based on what they told us."*

## **DISCUSSION**

The participants' ages indicate that all the participants were women of the child bearing age in Malawi. The results that the majority of women in this study were 35 years of age agree with those reported by the 2010 Malawi Demographic Health Survey that HIV prevalence increases with age for both men and women and that for women the HIV prevalence is highest among the 35-39 age groups (NSO, 2011). The results further show that most of the participants were within the reported high risk group of child bearing age, i.e., above 35 years old. The women in this study were in addition to being at risk of pregnancy complications also HIV positive which is another risk factor for pregnancy complications. Therefore, there is a need for quality HIV testing and counselling services to ensure continuity of care that prevents an increase in the maternal mortality rate.

The majority of the participants had already made a decision while at home to get tested for HIV upon initiation of ANC. These results could be attributed to increased awareness about HIV/AIDS and PMTCT services. Recently, more people are opting for an HIV test due to availability of ARVs and the other support services (Muheriwa et al., 2012). Therefore, the women were reassured by the fact that medications were available to protect their babies from contracting the virus. The increased awareness about HIV and PMTCT services is also supported with the findings of the Malawi Demographic Health Survey (2010), that the percentage of people who know that HIV can be transmitted through breastfeeding and that MTCT can be reduced by taking special drugs has increased from 37 in 2004 to 83% in 2010 among women and from 29 in 2004 to 71% in 2010 among men (NSO, 2011).

The results show that the main motivation factor for the majority of the participants to get tested was the desire to know their status so that they can protect their babies. Similarly, Muheriwa et al., (2012) reported that women preferred HIV testing during ANC so that they should be enrolled into PMTCT program to protect their babies. In addition, women in this study opted for becoming pregnant to raise children despite their HIV positive status because of the availability of PMTCT services. The results therefore show that women preferred to become pregnant and participate in routine HIV testing and counselling as an entry point in PMTCT. They were however, reluctant to avoid becoming pregnant which is also one of the recommendations on the national PMTCT guidelines.

Results show that some women in the study opted for HIV testing and counselling during ANC because they frequently fell sick. HIV compromises immunity in the body and hence the patient suffers from frequent opportunistic infections. Consistent with these findings, a study conducted in Tanzania which examined the circumstances and social contexts in which individuals were tested, also reported that a large majority of persons interviewed had been chronically ill when they were tested for HIV (Lugala et al., 2008). The results therefore show that more women opted for HIV testing to confirm their HIV status because they or their partners were frequently ill with symptoms that suggested a possible HIV infection.

All participants felt that they voluntarily made the decision to get tested for HIV however only half of the participants were aware of the possibility to opt out. This was confirmed through observations as it was noted that opting out was not mentioned at all during health talks. These results indicate that the women did not receive all the required information to make an informed decision. Similarly, in a study conducted in Malawi to explore the perceptions of HIV testing, the majority of the women that were interviewed had been tested during antenatal clinic but were not given any option to opt out of the HIV test

(Angotti et al., 2010). There is a need to fill this information gap so that the celebrated increased uptake of HIV testing and counselling during ANC should be based on the women's own choice to opt into taking the HIV test.

It is encouraging to note that even though some women were not aware of the possibility to opt out, they still felt that they could have chosen to be tested, if they were given both options. These results imply that there would still be an increase in the coverage of HIV testing and counselling and PMTCT services hence contributing to the reduction of maternal and neonatal mortality. These results agree with those reported from a study that was conducted in Botswana to ascertain if women felt coerced within the context of routine provider initiated HIV testing. Most postnatal women (94%) stated that they wanted to take an HIV test when they were pregnant (Baek et al., 2009). The results show that women are prepared to undergo HIV testing and counselling during ANC despite having little information about the test.

The results that some participants were tested because they came for antenatal care and were told to do so by the health workers imply that the participants thought that HIV testing during ANC was compulsory. Similar results were obtained in Malawi during the assessment of the perceptions of HIV testing at antenatal clinics in rural Malawi. Findings revealed that rural Malawians do not perceive HIV testing as a choice, but rather as compulsory in order to receive antenatal care (Angotti et al., 2010). Similar findings were also found in Uganda where pregnant women who received ANC from facilities that provided HIV testing perceived HIV testing as being compulsory and the women underwent the testing and counselling without actually realizing the benefits of taking the test and PMTCT (Larsson, et al., 2011). However these findings imply a positive outcome because the enrolment into routine HIV testing and counselling is increased when women are not given an option to opt out. Furthermore, some women who may think that they are not at risk of being HIV positive are identified and assisted accordingly. However according to Durojaye (2006), some of the women who opt for HIV testing, especially the illiterate and poor, may be coerced into taking the test because others are taking it. The Malawi integrated guidelines for providing HIV services stresses that patients should be reminded during pre test education (group or individual) that they can decline HIV testing without any consequences (MoH, 2011). Therefore conducting routine HIV testing and counselling without giving the patients an option to opt out is not in accordance with recommended standard of practice.

Majority of the participants indicated that they were satisfied with the time that was provided for them to make a decision to get tested. However, according to UNESCO Chair of Bioethics (2003), a patient should be able to

comprehend the meaning of the information, balance pros and cons, draw inferences from the data with reasonable rationality, assess the circumstances, appreciate the aspects of the situation, and reach a deliberate decision on the basis of the available information. For all the above to be achieved there is need for more time and adequate information for the mothers to deliberate and make choices. In addition, some women indicated that they could have invited their spouses to come for testing together during the next visit, hence increase male participation in reproductive issues. Males being the decision makers in most homes in Malawi, their increased involvement in reproductive issues could help to reduce maternal and neonatal mortality.

### **Limitation**

The study was conducted at one district hospital in the central region of Malawi. The results therefore, like in any other qualitative study cannot be generalized to the whole country. The fact that a registered Nurse / Midwife conducted the study may have influenced the results, especially the conduct and coverage of antenatal care during the study.

### **CONCLUSION**

The voluntary opt out HIV testing and counselling has increased the coverage of HIV Testing and Counselling among pregnant women in Malawi. Most women that attend ANC want to know their HIV status to access PMTCT services if they tested HIV positive. The main motivating factor for taking HIV test is the desire to protect the unborn babies and to access HIV treatment and care when the results are positive. The opt-out option is not emphasized by health workers during ANC education, however, the women could still have opted for the test even if they had been told about the opt out option. In view of the expanded coverage of voluntary HIV Testing and Counselling, there is a need for the service providers to adhere to the guidelines, so that quality services are provided. There is also a need to create awareness among the communities so that the pregnant women make informed decisions when opting for HIV testing and counselling during antenatal clinics.

### **Competing interests**

The authors declare that none of them has any competing interest in the manuscript being published in the journal of research in nursing and midwifery.

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