Likely stakeholders in the prevention of mother to child transmission of HIV/AIDS in Blantyre, Malawi

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ABSTRACT

Objectives: To determine potential partners for pregnant women in the prevention of mother to child transmission of HIV and to determine pregnant women's perceptions towards selected potential HIV prevention efforts

Design: Cross sectional, questionnaire-administered study

Setting: Ante-natal clinics of eleven public health centers and the major referral and university teaching hospital of Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi

Subjects: A total of 321 pregnant women attending ante-natal clinics

Results: Antenatal women in Blantyre, Malawi obtain health information on HIV/AIDS from the radio (96.3%), health workers (82.2%), religious gatherings (66.7%), friends (54.8%) and newspapers (39.3%). The majority intend to be accompanied by own mother and sister for delivery (52.4% and 15.4% respectively). Almost all (99%) planned to breast feed with 91.8% reporting an intended breastfeeding period of at least 6 months. About 97% of married women reported desire to tell spouse in case of HIV sero-positive results while only 65.1% had ever discussed about HIV with spouse, and only 5.2% had ever attended antenatal clinic with spouse. Whether woman had ever discussed about HIV/AIDS with spouse or not did not influence desire to disclose HIV status to spouse.

Conclusion: Close relatives, spouse and the media are important stakeholders in the health of pregnant women. Programs aimed at prevention of mother to child transmission of HIV should give serious consideration to these partners.

Keywords: Mother-to-child transmission of HIV, anti-retrovirals

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INTRODUCTION

The HIV/AIDS pandemic is among the largest global public health problems facing humankind in the 21st century and sub-Saharan Africa has been hardest hit. [1] HIV/AIDS is reversing the hard-earned social and economic gains achieved by the sub-continent over the past decades.

HIV transmission in developing countries is mainly through heterosexual means, [2,3] mother to child transmission of the virus through breast milk and during foetal life.

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Maternal factors such as high viral load, recent HIV acquisition, genital infections, mastitis and non-use of anti-retrovirals, high maternal age and parity are all associated with the efficiency of transmission of HIV [4-6]. Van den Broek et al, reported high HIV sero-positivity in anaemic pregnant women as compared to general antenatal clinic attendees in Blantyre, Malawi (47.1% vs. 30.1%).[7]

Immediately following the detection of HIV in breast milk in 1985, it was generally accepted that there was no realistic alternative feeding option to breastfeeding in developing countries.[8] However, over the past several years, the debate has continued and the original view is being modified. Although the majority of HIV infected persons in Africa have no access to anti-retrovirals, this intervention is increasingly being made available and accessible to HIV infected pregnant women through prevention of mother to child programs. [9-11]

Malawi's HIV sero-prevalence rates in the adult population

are estimated between 10-15%.[12] HIV sero-positivity among women attending antenatal clinics at the major referral hospital in Blantyre, Queen Elizabeth Central Hospital (QECH) has been estimated at approximately 30%. [13]

The Malawi National AIDS Commission, other healthcare policy makers and program planners have identified prevention of mother to child transmission as a priority area in the fight against HIV/AIDS. [14] However there exists paucity of in-country data in so far as the perceptions of affected women groups are concerned and the potential stakeholders to be mobilized. A number of programs are being planned or are in the implementation phases to prevent mother to child transmission.

This study was therefore carried out to document perceptions, practices, and potential partners of pregnant women attending antenatal care services in Blantyre district, southern Malawi.

MATERIALS AND METHODS

A cross sectional study was conducted in 2003 among pregnant women attending ante-natal clinics at eleven public health centers and the major referral and university teaching hospital at Queen Elizabeth Central Hospital (QECH), Blantyre, Malawi.

The questionnaires were administered by trained research assistants to all women who provided verbal consent to participate in the study.

During the study period, each of the health facilities was visited on the days an ante-natal clinic was scheduled. Pregnant women were informed about the objectives of the study and if agreeable, consecutive women presented themselves for questionnaire administration. The participants were informed that they were free not to answer any particular question(s) they were uncomfortable with.

The questionnaire included the following items: demographic characteristics, intention to breastfeed infant (after childbirth), perceived spousal support and practice in communication, person likely to accompany them to the delivery unit during child birth and perceptions towards potentially HIV preventative methods.

Descriptive data were analysed to obtain frequencies. At the time of the study, only QECH among the research sites was offering ARVs to women enrolled in research projects. The HIV sero-status of women participating in the study was not sought.

RESULTS

A total of 321 women participated in the study of which 308 (96.3%) were married, 8 (2.5%) single, 3 (0.9%) widowed and 1 each (0.3%) divorced and not specified. The mean age in years was 24.3 (std deviation, 4.7). Two hundred eighty three (88.2%) participants were house wives, 36 (11.2%) employed and 2 not specified. For 114 (35.5%) participants, this was their first antenatal visit while 207 (64.5%) were coming for a subsequent visit. The gravidity range was 1 to 7, with those of gravidity 3 and below being 216 (67.3%) and those gravidity 4 and greater, 105 (32.7%). Participants' main sources of HIV information are listed in Table 1. The 'other' sources included at school, drama, workplace and political party meetings.

Table 1: Sources of HIV/AIDS information

HIV information source	Frequency (%)
Radio	309 (96.3)
Health workers	264 (82.2)
Religious gatherings	214 (66.7)
Friends	176 (54.8)
Newspapers	126 (39.3)
Posters and billboards	107 (33.3)
Spouse	79 (25.6)
Television/video	24.6 (24.6)
Other	76 (23.7)

Peri-delivery practices

Out of 320 participants, 98.1% (314) indicated desire to deliver at a health facility, 4 (1.3%) at home, and 1 (0.3%) each at home and at traditional birth attendant's place. Participants were also asked who was likely to be their guardian during child delivery. The responses are presented in Table 2.

Table 2 : Person likely to be guardian at child birth

Potential guardian	Frequency (%)
Own mother	167 (52.4)
Sister	49 (15.4)
Nobody	23(7.2)
Friend	20 (6.3)
Mother-in-law	17 (5.3)
Other	25 (7.8)
Sister-in-law	18(5.6)
Total	319 (100)

Perceptions towards breast feeding

A total of 320 (99.7%) participants reported intention to breast feed infant while only 1 (0.3%) indicated non-willingness. For the 320 participants that had intended to breast feed, 319 responded to a question asking the period they would intend to breastfeed. Six (1.9%) reported a desired breastfeeding period of not more than 4 months, 7 (2.2%) between 4-6 months, 293 (91.8%) longer than 6 months.

Of the 299 married participants, 89.6% reported that they expected the spouse to provide support in breastfeeding, 4.0% would not and 3.7% were not sure of spousal support.

In an open-ended question, participants were also asked what they would think if a woman with a neonate was not breastfeeding. The perceptions provided were: the mother wished to kill her baby by starving it, the mother is pregnant again, or the baby is not hers, the mother is sexually promiscuous so does not want to "contaminate the milk", the mother has any of: diseases of the breast, tuberculosis or HIV/AIDS. Other reasons for not breastfeeding were: the child is failing to suck, the mother is weak, the woman does not want her breasts to shrink, or the child is not hers/ or baby has been stolen. It was also perceived that some women who had formal employment could stop breastfeeding early while others could stop breastfeeding to demonstrate that they are financially able to feed a child formula milk.

Spousal/peer communication and support

Out of 308 married participants, 200 (64.9%) reported to have ever discussed HIV/AIDS with spouse, while 109 (34.7%) had never done so. However slightly more participants 251/321 (78.2%) had discussed HIV/AIDS with friends while 70 (21.4%) had never done so.

When asked whether they normally inform their spouses when they receive medications from a health facility, 305/308 (99.0%) reported doing so while 3 (1%) would not. Out of 308 married participants, 296 (96.1%) would disclose their HIV status if found HIV positive to spouse while 6 (1.9%) would not and 3 (0.9%) were not sure. However, whether one has ever discussed HIV with husband or not was not associated with desire to disclose HIV status ($p=0.46$).

Participants were also asked whether if tested HIV positive, they would inform any other person (other than spouse) the results of the tests. Approximately half, 154/320 (48.1%) indicated they would not disclose, 155 (48.4%) would disclose while 11 (3.4%) were not sure.

Participants were also asked whether they thought their spouses could accept to accompany them to the antenatal clinic when asked to do so by a health worker. 219 (71.1%) reported belief that spouse would accompany them, 65 (21.1%) not and 23 (7.5%) were not sure. However, those that had ever been accompanied to antenatal clinics by spouse were only 16 (5.1%), while 290 (94.1%) had never and 2 (0.6%) were missing.

Perceptions towards HIV sero-positivity

In order to determine acceptability to anti-retrovirals, participants were also asked whether in the situation that they had a positive HIV test result they would accept antiretroviral therapy for the prevention of mother to child transmission of HIV. About 88.4% (284) said they would accept, 21 (6.5%) would not accept, 14 (4.4%) were not sure and 2 were missing. Three hundred and twenty participants responded to the question about whether they thought women who knew were HIV positive should get pregnant in case they wanted a child. Only 5.6% agreed, 89.7% thought known HIV positive women should not get pregnant while 4.7% were not sure. The majority, 259 (81.2%) of 319 however were of the opinion that HIV testing should be made routine at antenatal clinics, 37 (12.0%) thought not and 23 (7.2%) were unsure.

DISCUSSION

The results from this study document potential partners in the reduction of mother to child transmission of HIV. Other than the woman herself, these partners include: the spouse, the pregnant woman's mother and sisters, the media especially radio, newspapers, billboards and posters, health care workers and religious gatherings.

There was a high positive perception towards voluntary HIV counseling and testing within the antenatal clinic environment. At least 80% of the participants indicated that HIV testing should be made routine within the antenatal care structure. This agrees with a multi-center trial on pregnant women where HIV testing rates of between 33-95% were achieved.[15] However, it must be borne in mind that high testing rates within research settings may not be replicated within actual service settings. Also in our study, we only studied the desire and wish for testing; and this may differ with rates to be obtained for the actual testing if effected.

Although the majority of married women (71.3%) reported that they believed their spouses would attend

antenatal clinics with them if invited by healthcare workers, only a few (5.2%) had ever attended clinic with a spouse. One explanation to such finding is that husbands are not being invited to participate at antenatal clinics. In an environment where traditionally child bearing has been perceived as a female affair, healthcare workers have also conformed by not involving men. With the present HIV/AIDS situation, it is imperative that such practices be challenged and if possible, changed altogether. The non-involvement of men is also reflected in the suggested potential guardian during childbirth. The pregnant woman's own mother is a favoured companion, following by her sister.

Regarding desire to disclose HIV sero-positivity result, more women would disclose to spouse (97%) than they would to any other person 48%. Spouses of antenatal women should therefore be important stakeholders in the HIV prevention of mother to child programs. This is different from what was observed by Issiaka et al [16] in their study in Mali where HIV infected women were reluctant to inform the spouse of their HIV status. While the communities studied are different, it may also suggested that desire to disclose may not be reflected in actual disclosure. Maher et al [17], in their study of 490 women in Newark and Miami did not find any association between history of domestic violence or fear of violence from spouse to have influence on desire to test or desire to disclose.

There is need for individually-tailored support to women who test HIV positive. Male involvement has been advanced in family planning programs with some success,[18] Although this study did not determine the exact reasons for pregnant women's preference of breastfeeding, the acceptance of the practice is high (99.7%). Many women (92.3%) reported likelihood of spouse to support breastfeeding. This therefore emphasizes the importance of engaging males in the PMTCT programs. Widows, divorced and single pregnant women are particularly vulnerable groups and may require specialized interventions.

While the acceptability of breast feeding is high (99.7%) women seemed to indicate that a nursing mother who has some breast disease may decide not to breastfeed for fear of infecting infant. This may be good practice in a high HIV prevalence community as breast infection and inflammation can facilitate HIV transmission to the child. [4,19]

Recent findings suggesting that treatment with chloroquine (an anti-malarial) may prevent vertical (mother to child transmission) of HIV is another area that requires continued study, follow-up and stakeholder mobilisation. [20,21.]

Limitations of the study

The study area involved both urban and rural areas of Blantyre district. The majority of Malawians (85%) live in rural areas where access to public healthcare services is not readily available and accessible. Many pregnant women may therefore not be attending clinics in the other much rural districts. Although there was a high willingness to deliver at health facility, Lule and Mtitimila reported intention of place of delivery does not always materialize.[22] In their study of 90 pregnant women, 95% reported intention to deliver at health facility and yet only 24% eventually delivered at health facility. The intended practices reported in our study must therefore be viewed with the limitations inherent in such type of findings.

CONCLUSION

Many women either perceive or have close relatives, spouse and the media as important stakeholders in their health. Concerns regarding domestic violence, availability of support, both within and outside the home need to be addressed at both individual and societal levels. Programs aimed at prevention of mother to child transmission of HIV should give serious consideration to these partners.

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