

Original article

Pregnant women's knowledge of perinatal HIV infection in a resource limited setting

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The purpose of the study was to assess pregnant women's knowledge of perinatal human immunodeficiency virus (HIV) infection. A descriptive study involving 100 consecutive and consenting patients at the antenatal clinic of Abia State University Teaching Hospital (ABSUTH), Aba, South Eastern Nigeria, over the period 1st November, 2007 to 15th January, 2008 was done. Using a structured questionnaire, the respondents' sociodemographic data were recorded as well as their knowledge of perinatal HIV infection. Although 85% of the pregnant women were aware of perinatal HIV transmission, only 69% knew that if a baby tested positive to HIV at delivery, it meant that the mother is infected with HIV. Fifty one percent of the pregnant women wrongly thought that all babies born to mothers with HIV also get infected whilst 83% knew that HIV can be transmitted through breast feeding. The pregnant women demonstrated an incomplete knowledge of perinatal HIV transmission. The findings of this study underscore the continued need for intensified health education about prevention of perinatal HIV infection in our community in order to reduce the impact of HIV, especially in children

Keywords: pregnant women, knowledge, perinatal, HIV, transmission.**INTRODUCTION**

HIV infection is currently a major public health problem in Nigeria and other sub-Saharan African countries. Most children living with HIV acquire the infection through mother-to-child transmission (MTCT). This can occur during pregnancy, labour and delivery or during breast feeding. Transmission of HIV to children has become a critical health problem undermining the positive impact of child survival strategy in the African continent^[1]. Pregnant women susceptible to HIV and its transmission to the fetus provide a unique opportunity for implementing preventive strategies against HIV infection of newborn babies^[2]. Despite continuing advances in scientific knowledge about perinatal HIV transmission and pre-

vention, there is a paucity of data on pregnant women's knowledge of perinatal HIV infection in Aba, South Eastern Nigeria. The findings of the study would provide baseline information for evaluating the effectiveness of currently employed health education strategies about perinatal HIV transmission in our community. Hence, the need for this study.

METHODS

This was a hospital based descriptive study conducted between 1st November, 2007 and 15th January, 2008 at the antenatal clinic of ABSUTH, Aba, South-Eastern Nigeria. One hundred consecutive antenatal patients who gave informed consent to participate in the study were enrolled. Using a structured questionnaire, the respondents' sociodemographic data were obtained as well as their knowledge of perinatal HIV infection. Data analysis included descriptive statistics and content analysis for interview data. Ethical approval was obtained from the ethical and

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research committee of ABSUTH, Aba.

RESULTS

A total of 100 consecutive antenatal clinic attendees were recruited for the study. Table 1 shows the socio-demographic characteristics of the respondents. Ninety seven (97%) of the respondents were aged between 20 and 39 years. Ninety nine (99%) of the respondents were married whilst ninety eight (98%) had attained secondary education or higher. Eleven

(11%) of the respondents were housewives, twenty seven (27%) civil servants and ten (10%) were corporate workers.

Table 2 shows that 85% of the pregnant women were aware of perinatal HIV transmission and 69% knew that if a baby tested positive to HIV at delivery, it meant that the mother is infected with HIV. Fifty one percent of the pregnant women wrongly thought that all babies born to mothers with HIV also get infected whilst 83% knew that HIV can be transmitted through breastfeeding.

Table 1: Socio-demographic characteristics of respondents

Characteristics	No	Percentage (%)
Age (years)		
20-29	45	45
30-39	52	52
40-49	3	3
Marital Status		
Married	99	99
Divorced/ Separated	1	1
Level of Education		
Primary	2	2
Secondary	29	29
Tertiary	69	69
Occupation		
Housewife	11	11
Trader	27	27
Student	21	21
Civil servant	31	31
Corporate workers	10	10

Table 2: Knowledge of perinatal HIV transmission

Variable	Number	Percentage (%)
Is it possible for a pregnant woman who is infected with HIV to pass the virus to her unborn child?		
Yes	85	85
No	15	15
Supposing a baby tests positive to HIV at delivery, does it mean that the mother is infected with HIV?		
Yes	69	69
No	31	31
All babies born to mothers with HIV also get infected		
Yes	51	51
No	49	49
A woman who is infected with HIV can give the virus to her baby during breastfeeding		
Yes	83	83
No	17	17

DISCUSSION

This survey which was conducted in South Eastern

Nigeria indicates that 85% of the pregnant women were aware of perinatal HIV transmission. Similar high levels of awareness of perinatal HIV transmission of 95%, 93.3% and 94.2% respectively were reported among antenatal clients in Kano, Northern Nigeria^[3], Lagos, South western Nigeria^[4] and among adults in rural Ethiopia^[5]. Other studies suggested that approximately 90% of United States women are aware of perinatal HIV transmission^[6,7]. In contrast, results of a Thai study showed that 80% of pregnant women did not have proper knowledge of the possibility of mother-to-child transmission of HIV^[8]. Slightly more than half of respondents in a Sudanese study were aware of mother-to-child transmission of HIV^[2].

Despite 85% of the respondents in this study being aware of perinatal HIV transmission, only 69% knew that if a baby tested positive to HIV at delivery, it meant that the mother is infected with HIV. Fifty one percent of these pregnant women wrongly thought all babies born to mothers with HIV also get infected. Eighty three percent of the respondents knew that HIV can be transmitted through breastfeeding. Although this figure is higher than 12.9%, 58.3%, 60% respectively, reported among antenatal patients in Kano, northern Nigeria^[9], Lagos in south western Nigeria^[4] and in four locations in the United States of America^[10], there exists a gap in knowledge of HIV transmission through breast milk. Thus, there is incomplete knowledge about perinatal HIV transmission. The findings of this study suggest that greater public health efforts are needed to educate women about perinatal HIV transmission and its prevention.

In interpreting the results of this baseline survey, some study limitations need to be considered. The sample size was small as this was a pilot study. The subjects in the study consisted of pregnant women only as they were more easily accessible. Studies with much larger sample sizes in Aba and other communities in South Eastern Nigeria are warranted. In conclusion, the pregnant women demon-

strated an incomplete knowledge of perinatal HIV transmission. The findings of this study underscore the continued need for intensified health education about prevention of perinatal HIV transmission in our community.

REFERENCES

- 1 Federal Ministry of Health, Nigeria National Guidelines on Prevention of mother to child transmission (PMTCT) of HIV. Ministry of Health, Abuja, Nigeria. 2007.
- 2 **Mahmoud MM**, Nasr AM, Gasmelseed DA et al. Knowledge and attitude towards HIV voluntary counseling and testing services among pregnant women attending an antenatal clinic in Sudan. *JMed Virology*. 2007; 79:469-4737.
- 3 **Iliyasu Z**, Kabir M, Galadanci HS et al. Awareness and attitude of antenatal clients towards HIV voluntary counseling and testing in Aminu Kano Teaching Hospital, Kano, Nigeria. *Niger JMed* 2005; 14: 27-32
- 4 **Ekanem EE**, Gbadegesin A, Voluntary counseling and testing for human immunodeficiency virus: a study on acceptability by Nigerian women attending antenatal clinics. *Af J Repr Health* 2004; 8: 91-100
- 5 **Alemu S**, Abseno N, Degu G et al. Knowledge and attitude towards voluntary counseling and testing for HIV: a community based study in Northwest Ethiopia. *Ethiopia J. Health Dev*. 2004; 18: 82-89
- 6 **Koniak-Griffin D**, Brecht M. AIDS risk behaviours, knowledge and attitudes among pregnant and young mothers. *Health Educ Behaviour* 1997; 24: 613-24
- 7 **McNicol LB**, Hadersbeck RE, Dickens DR, Brown JE. AIDS and pregnancy: Survey of knowledge, attitudes and beliefs and self identification of risk. *J Obstet Gynecol Neonatal Nurs* 1991; 20: 65-72
- 8 **Hyodo C**, Tanaka T, Kobayashi M, Shimizu M, Prueksunand P, Nitithamyong A. Factors affecting attitudes towards mother-to-child transmission of HIV among pregnant women in a maternal and child hospital in Thailand. *International Journal of STD & AIDs* 11(6):406-409
- 9 **Iliyasu Z**, Abubakar IS, Kabir M, Muktar HA. Knowledge of HIV/AIDS and attitude towards voluntary counseling and testing among adults. *Journ. Nat. Med. Assoc* 2006; 98(12): 1917-1922.
- 10 **Walter EB**, Royce RA, Fernandez MI et al. New mothers' knowledge and attitudes about perinatal Human Immunodeficiency Virus Infection. *Obstet Gynecol* 2001; 97(1): 70-76