PREGNANT WOMEN' S KNOWLEDGE OF AND ATTITUDES TO HIV TESTING AT KOMFO ANOKYE TEACHING HOSPITAL, KUMASI

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SUMMARY

A questionnaire survey on the knowledge about human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and attitudes to voluntary counselling and testing (VCT) in pregnancy of 334 antenatal attendants at Komfo Anokye Teaching Hospital (KATH) was conducted. The survey showed that HIV/AIDS is recognized as a life-threatening condition and is mainly acquired through unprotected sexual intercourse with an infected partner, use of unsterile sharp instruments and blood transfusion. Knowledge about mother to child transmission (MTCT) was lacking.

The majority of women who had done the test did so as a pre-requisite for church blessing of their marriage.

VCT would be acceptable especially when anonymity is ensured and drug treatment is available for mother and child should the pregnant woman test positive for HIV.

Keywords: Knowledge, attitudes, HIV/AIDS, Komfo Anokye Teaching Hospital.

INTRODUCTION

There is increasing public awareness about HIV/AIDS in Ghana as has been found in other parts of Africa[1]. This awareness varies with differing levels of education and access to information. The mass media especially radio and television play a crucial role in providing information and education on HIV/AIDS[2].

The prevalence of HIV among pregnant women is a good indicator of the spread of the epidemic in the general population, as the level of HIV infection among pregnant women is similar to that in the general population of men and women aged 15 to 49 years[3].

The median HIV prevalence at 24 sentinel sites among women attending antenatal care clinics in Ghana in 2002 was 3.4% in women aged 15 to 49 years[4]. Comprehensive programmes in voluntary counselling and testing (VCT), prevention of mother to child transmission (PMTCT) and antiretroviral therapy (ART) have been carried out in Atua Government Hospital in the Manya Krobo District and Saint Martin's Hospital, Agormanya with very encouraging results[5].

In 2001, the United Nations General Assembly Special Session (UNGASS) placed a clear emphasis on the effect of HIV/AIDS on maternal and child health. The final declaration of commitment from the assembly stated that the proportion of infants infected with HIV should be reduced by 20% by 2005, and by 50% by 2010[6]. This goal was to be reached by ensuring that 80% of pregnant women who receive antenatal care have access to HIV prevention services.

At the time of this survey, voluntary counseling and testing, PMTCT and ART were not available to antenatal attendants at KATH. There were however plans to introduce these programmes in KATH in the near future. This survey was therefore carried out to find out how much pregnant women knew about HIV/AIDS, MTCT and their attitudes to VCT.

PATIENTS AND METHODS

A pilot study was conducted during the first two weeks in August 2003 using questionnaires designed to find out how much pregnant women knew about HIV/AIDS, MTCT and also their attitudes to VCT. The pilot study recruited 30 patients. The questions were open-ended and the women were encouraged to give as much information about each item as they could. The interviewers were particularly careful not to ask leading questions or suggest answers to the patients. The answers obtained from the pilot study were used to modify and expand the questionnaire for the definitive study.

The definitive study was conducted from 1st September to 31st October 2003. Each day when patients registered for antenatal care, they were given consecutive numbers according to time of presentation. A table of random numbers was used to identify subjects to be interviewed[7,8]. The study was explained to each selected patient and verbal consent obtained. No patient refused to participate and no patient was interviewed on more than one occasion.

The questionnaire recorded basic demographic data including age, parity, educational status, occupation, marital status and religious beliefs. This was followed by questions about basic knowledge of HIV/AIDS as well as sources of information. There were questions specific to MTCT and finally attitudes of patients to VCT.

The results were analysed using SPSS for Windows software.

RESULTS

There were 1109 total antenatal attendants out of whom 334 (30.1%) were interviewed. The ages ranged from 17years to 45years, with a mean of 28.3-± 5.8 years and a mode of 28.0 years. Their parity ranged from 0 to 8 with frequencies of 77 (23.1%) for para 0, 246 (73.6%) for para 1-5, and 11 (3.2%) for para 6-8.

The majority of the women (88.9%) were Christians; the rest were Moslems. Two hundred and three out of the 334 patients (60.8%) had attained only primary education; 89 (26.6%) had secondary education; 9 (5.7%) tertiary education and 23 (6.9%) had had no formal education.

The occupations of the 334 respondents fell into three broad groups: Skilled 34 (10.2%), Semi-skilled 259 (77.5%), and Unskilled 41 (12.3%).

The majority of the women (96.4%) were married including 5.1% who were in polygamous marriages. Eight women were single while four of the male partners were out of the country at the time of the study.

Table 1 summarises the responses of the antenatal attendants.

Table 1 Frequency analysis of knowledge about HIV/AIDS (N = 334)

	N	%
What is HIV/AIDS?		
STI (sexually transmitted infection)	334	100.0
Life-threatening disease	290	86.8
Blood disease	100	29.9
Other (e.g. curse, punishment)	5	1.5
How did you hear/learn about HIV/AIDS?		
Radio	300	89.9
Television	260	77.8
Church/Mosque	236	70.7
Friend	198	59.8
Health worker (Doctor/Nurse/Pharmacist)	170	50.9
Newspapers	130	38.9
How is HIV transmitted?		
Heterosexual intercourse	334	100.0
Injections (unsterile needles)	210	62.9
Blood transfusion	200	59.9
Unsterile instruments (barbers, manicure, pedicure)	180	53.9
Transplacental (in the womb)	32	9.6
Homosexual intercourse	18	5.4
Breast milk (breast-feeding)	11	3.3
Other (e.g. spiritual, witchcraft)	6	1.8
How long does it take from infection to appearance of symptoms?		
No idea	137	41.0
≤ 1year	60	18.0
>1year to ≤ 5years	88	26.3
>5years to ≤ 10years	37	11.1
>10years	11	3.3
Same day	1	0.3
What are some of the symptoms/signs of AIDS?		
Weight loss	290	86.8
Prolonged fever	270	80.8
Chronic diarrhoea	105	31.4
Recurrent boils	102	30.5
Rashes	90	26.9
Chronic cough	85	25.4
Herpes zoster (ananse)*	75	22.5
What is the cure/treatment for AIDS?		
No cure	299	89.5
No cure but palliative /compassion/prayers	35	10.5
How can HIV be prevented?		
Being faithful to partner	311	93.1
Abstain from sexual intercourse	297	88.9
Not sharing sharps	89	26.6
Condom use	65	19.5

* ananse = local terminology for skin blisters of herpes

Table 2 Frequency analysis of knowledge about MTCT*

	No.	%
Can an HIV positive woman transmit HIV to her baby? (n = 334)		
Don't know	157	47.0
Yes	173	51.8
No	4	1.2
For those answering yes (n =173)		
When does transmission from infected mother to her baby occur?		
Before birth (in the womb)	159	91.9
During labour	5	2.9
During breast feeding	9	5.2
How can HIV transmission from a positive mother to her baby be prevented?		
No idea	161	93.1
Giving drug to pregnant woman	3	1.7
Not breast-feeding	9	5.2

*MTCT = mother to child transmission.

Table 3 Frequency analysis of attitudes

	No.	%
Do you know your HIV status? (n = 334)		
No	290	86.8
Yes	44	13.2
Reasons given by those who have done test (n =44)		
Getting married (church request)	34	77.3
Partner tested	5	11.4
Wanted to know (went for VCT)	3	6.8
Other (e.g. when very ill)	2	4.5
Now that you are pregnant will you do the test after counselling? (n =290)		
Yes	261	90.0
No	29	10.0
Reasons given by those willing to do test after counseling (n = 261)		
If treatment is available if result is positive	203	77.8
If anonymity is strictly maintained	193	73.9
Others (e.g., if partner agrees)	21	8.0
Reasons given by those unwilling to do test even after counselling (n =29)		
I am not at risk	20	67.0
No treatment available	19	65.5
Not sure of anonymity (stigmatisation)	9	31.0

Table 2 summarizes the knowledge of the women about MTCT. About 50% of respondents said an HIV positive woman could transmit HIV to her baby before birth but had no idea of any means to prevent this. Teachers, nurses and pharmacists were aware that HIV could be transmitted during labour or breastfeeding and this could be prevented. They also knew of the use of drugs in pregnancy and the avoidance of breast-feeding as ways to prevent transmission.

Table 3 shows that 44 (13.2%) of the attendants had done the HIV test mainly as a pre-requisite for church blessing of their marriages. The majority (90%) of the remaining 290 women would be willing to undergo VCT if anonymity was guaranteed and treatment was available for those who tested positive. There were 20 women who would not do the test after counselling because they did not feel at risk.

DISCUSSION

Across the nation, awareness of HIV/AIDS is almost universal (99% for men and 98% for women) and the most common source of HIV/AIDS information is the radio and other sources include TV, newspapers, friends and churches[9]. This high level of awareness is borne out in this study where almost all respondents identified HIV/AIDS as a life threatening condition. The three major sources of information were radio, TV and churches/ mosques.

The 1998 Demographic Health Survey of the Ministry of Health (DHS MOH) reported that 89% of pregnant women attended antenatal clinic with a median of 4.6 visits. Seventy- five percent of women were seen before the third trimester. This high antenatal clinic coverage gives the opportunity to carry out VCT and start anti-retrovirals[10].

Stigmatisation and discrimination constitute a big challenge. In the 1998 survey (DHS MOH), 30 to 40% of Ghanaians stated that the government should quarantine or isolate people living with HIV/AIDS (PLWHAS)[10.] In this study, 73.9% of the women who had not done HIV test (193/290) were willing to do it only if anonymity is strictly ensured.

Sentinel surveillance has shown HIV prevalence in pregnant women to be greater than 40% in various settings in Botswana, Zimbabwe, and Swaziland[11.] Although sentinel surveys in Ghana have reported

a much lower prevalence of 3.4%[4] in pregnant women, there should be no complacency since the situation may worsen if appropriate interventions are not put in place.

It is noted that the women in this study were aware of common symptoms/signs of AIDS such as weight loss, prolonged fever and chronic diarrhoea. It is likely they have seen patients suffering from AIDS or seen such images on TV or in the newspapers. They were also aware that there is currently no cure for AIDS. Being faithful to one's partner or abstaining from sex were preventive measures stated but condom use was rarely mentioned perhaps because these were women who desired to be pregnant in the first place.

Areas of concern include the low level of acquisition of knowledge directly from health workers. There is a worrying lack of knowledge about the transplacental and breastfeeding routes of transmission particularly as the subjects were pregnant women. Awareness that HIV/AIDS could be passed from infected mother to her baby was relatively low (173 out of 334 or 51.8%). Only 125 out of 334 or 37.4% of women correctly said it takes between 1 to 10 years from infection to the appearance of symptoms of AIDS. These areas should form part of the talk given before each antenatal session and should be strengthened with the use of audio-visual aids.

The decision to do the HIV test is based on many factors including perceived benefits such as availability of drug treatment for the mother and baby. The advent of therapy in industrialized countries has greatly increased motivation for people to be tested for HIV, and has reduced the stigma associated with the disease[12,13,14]. Where there are real benefits in terms of ART, women are more likely to accept VCT in pregnancy, followed in positive cases by a short course of anti- retroviral treatment in other to reduce mother-to child transmission of HIV even in breastfeeding populations[14].

People may not perceive themselves to be at risk. Sexually active people may recognise personal risk but not appreciate the risk derived from high-risk behaviour of a partner. Denial of risk is a common coping mechanism[15] as demonstrated by 20 of the women in this study.

Thirty-four of the women (10.2%) were required to do the test prior to marriage in the church. This finding compares with the study by Maman in which two out of fifteen couples (13.3%) interviewed said that they were required by the church to test prior to marriage (mandatory testing)[16]. Women may also seek partner consent prior to testing as shown by the 21 out of 261 (8.0%) in this study. There is anecdotal evidence that spousal consent affects uptake of PMTCT services in Ghana. It is suggested that further studies are done to elucidate the relationship between knowledge of vertical transmission and attitude to MTCT and VCT as these will ultimately influence policy and planning.

CONCLUSION

This study shows that the women attending the ante-natal clinic in KATH recognised HIV/AIDS as a life threatening condition and they were aware of the main symptoms and signs. They also knew the main modes of transmission. There should however be increased education on MTCT and the benefits of VCT and ART.

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