



Antenatal HIV testing

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OBJECTIVE(S): To analyze the acceptance and response to antenatal HIV testing in a teaching hospital, using an opt-in strategy.

METHOD(S) : Data of 8309 women attending the antenatal clinic for the first (booking) visit who received antenatal HIV testing was entered and analyzed by EPI 6 software.

RESULTS : Seroprevalence of HIV was 1.09%. Only 30.3% returned for post-test counseling. Thirty-three of the 41 spouses accepted HIV testing. Awareness about HIV and mode of transmission was poor.

CONCLUSION(S): There is a need to spread more information and awareness about HIV testing in the antenatal clinic setting. Mechanisms to improve the post-test counseling coverage rates need to be considered.

Key words : antenatal HIV screening, acceptance of HIV testing

Introduction

Prenatal identification of HIV infected women is crucial to the delivery of optimal care to both mother and fetus. Universal screening of all pregnant women is cost effective and has clearly demonstrated reductions in HIV-1 maternal-fetal transmission even in low prevalence setting¹⁻³. Identification of HIV infection during pregnancy allows the infected woman to make an informed decision about continuing the pregnancy and about interventions to decrease the risk of mother to child transmission. Other benefits include the appropriate management of the infected woman and the opportunity to identify infected partners or to decrease the risk of transmission to uninfected partners. Targeted testing of only pregnant women at high risk is no longer recommended because it fails to identify substantial proportion of HIV positive pregnant women⁴. Antenatal screening for HIV was added to the antenatal screening

package in June 2003 by the Gujarat State Aids Control Society (GSACS). From the start of the service the uptake of antenatal testing for HIV has been carefully monitored. This paper analyzes the offer and uptake of antenatal HIV testing in a teaching hospital in south Gujarat.

Methods

Ours is a tertiary hospital with approximately 4500 deliveries per year. Daily antenatal clinics at the hospital include both low and high risk gravidas who are cared for by obstetricians. The clinic is also staffed by a specialist HIV counselor who offers pre- and post-test counseling and gives information about HIV. The universal screening policy was implemented in June 2003. Data were collected from all new antenatal registrants on a printed questionnaire regarding maternal demographics (age, marital status, gravidity, parity, addictions, blood transfusions and illicit drug use), obstetric history, medical history, and HIV/AIDS awareness. Data were entered into the EPI 6 software for analysis. The data was analyzed over a 19 month period from June 2003 to December 2004 and is presented here.

Results

There were 9173 new antenatal booking visits during this period, of which 8309 (90.6%) women accepted HIV testing. The seroprevalence of HIV was 1.09%. Only 30.3% of all

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women who had the testing returned for post-test counseling, whereas 41 (45.05%) of the 91 seropositive women came back for post-test counseling. While all 41 spouses underwent post-test counseling only 33 accepted HIV testing. Of these 30 (90.09%) tested positive for HIV (Table 1). Those who tested negative were advised repeat testing after 3 months and use of barrier contraception in the meantime. Eight husbands did not accept HIV testing at the post-test counseling and even thereafter despite repeated requests. When asked about whether they had heard about HIV, 8.2% said yes, 10% said no, and no response could be elicited from 81.8%. Three percent were also aware about the mode of transmission of HIV.

Table 2 shows the maternal demographic characteristics. The mean age of the women was 23.73 years, mean gravidity 2.29 and mean parity 2.1. Majority (95.6%) of the women booked for delivery either in the second or third trimester. The literacy rate was 56.1% for women and 59.8% for their husbands.

Table 1. Antenatal HIV testing uptake (n=9173).

Antenatal HIV testing	Number	Percent
New AN registrations	9173	
Women who accepted testing	8309	90.58
Women with awareness about HIV	681	8.2
HIV positive	91/8309	1.09
Women who attended post-test counseling	2742/8309	30.3
Number of HIV positive women who attended post-test counseling	41/91	45.05
Number of partners of HIV positive women who accepted testing	33/41	80.5
Number of spouses testing positive	30/33	90.09

Table 2. Maternal demographic characteristics.

Characteristics	
Age (Mean \pm SD) years	23.73 \pm 3.89
Gravidity (Mean \pm SD)	2.29 \pm 1.47
Parity (Mean \pm SD)	2.097 \pm 2.8
Trimester of booking for delivery	
First	366 (4.4%)
Second	3182 (38.3%)
Third	4761 (57.3%)
Literate women	4653 (56%)
Literate husbands	4969 (59.8%)

Discussion

Our data demonstrates the acceptance and response to universal HIV counseling and voluntary screening in a busy antenatal tertiary care unit using an opt-in strategy. Voluntary testing strategies are of two types, opt-in and opt-out. Under the opt-in approach HIV testing is offered by the family physician or obstetrician and can be done only after formalized counseling and informed consent. The proportion of women agreeing to undergo HIV testing through the opt-in approach is reported to be in the range of 36% to 86%^{2,3}. In our study, the acceptance of HIV testing was 90.6%.

Only 30.3% of all women and 45% of seropositive women returned to collect the test reports and for post-test counseling. It is not clear why a large number of women failed to return for collecting test report and for post-test counseling. In a busy general hospital, it is impossible to make home visits to explore the reasons for failure to follow-up. Reported patient related barriers to screening include patient perception that she is not at risk, fear of rejection by friends and family, and fear of the diagnosis⁶. Other reasons could be poor awareness and education about HIV, and perhaps not enough emphasis being placed on the importance of the post-test counseling during the pretest counseling visit. With no responses available from 81.8% of subjects, it is difficult to gauge the general level of awareness about HIV in this population. Although 90.6% women accepted HIV testing in pregnancy, the attendance for post-test counseling was very low at 30.3%. This implies that the need for HIV testing is not as yet perceived as a 'felt need' among antenatal clinic attendees.

The antenatal booking visit is a sensitive time when much information is being exchanged and it is important that this information be imparted in a way that is both acceptable and effective but without causing fear and alarm in the patient. Use of additional tools may be considered to supplement the formal counseling. Given the overall poor literacy rate, information leaflets are unlikely to be beneficial. Alternative methods such as use of audiovisual aids and informal education by a nurse counselor or social worker while the woman is waiting for her turn in the antenatal clinic may be considered. To improve the attendance for post-test counseling, different types of defaulter actions could be considered, such as sending a postcard or making telephonic contact to remind about post-test counseling. If possible, a home visit can also be made.

Conclusion

There is a need to spread more awareness and information about HIV testing in the antenatal clinic setting. Mechanisms to improve post-test counseling coverage rates need to be

considered, depending on availability of staff and infrastructure.

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