" HIV AND PREGNANCY IN URBAN INDIA "

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SUMMARY

A cross sectional study of pregnant women presenting in the antenatal clinic was conducted. The seroprevalence rate was 8% overall and 57% of women reported more than one life time sexual partners. Infection rate was also high in women with steady relationship. History of veneral diseases was reported in only 30% of cases. The epidemic of HIV infection has spread beyond high risk groups to general population of women without known risk factors. For most of these women a steady male partner is the source of risk and therefore a vital target for intervention. Considering high prevalence of seropositivity in low risk group, antenatal screening needs to be extended to all women who seek care during pregnancy.

INTRODUCTION

Since the first case report in 1986 from Bombay, there has been increasing trend in number of cases as reported from various sectors.

Amongst the various mode of infection heterosexual mode of transmission account for majority of cases. India has been classified as pattern III as far as spread of HIV is concerned but, recently there has been rapid spread of the virus particularly amongst prostitutes and promiscuous individuals. Rising seroprevalence in prostitutes from 35/1000 in June 1989 to 150/1000 in December 1991 has been followed by succesive waves of transmission into male clients and from them into their wives and girl friends in general population.

The risk of HIV infection for women is a result of sexual behavior of the females and their sexual partners. Moreover women as such are more prone to such infection.

A study was conducted in an urban area of Bombay/India to find out the behavioral and demographic risk factor of HIV infection

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in pregnant women.

MATERIAL AND RESULTS

The study was conducted in Cama and Albless Hospital of Women and Children, Bombay. HIV testing was offered to 365 women attending the antenatal clinic and a total of 348 cases were subjected to the double ELISA testing for HIV. We found ELISA test positive in 28 cases. Further questioning and examination of these cases showed that 16 cases out of 28 had exposure to multiple sexual partners. Only one case had history of blood transfusion and one case was a chronic drug user. Out of the other 12 cases with no obvious risk factors 11 were married and had only single sexual partner and one case was an unmarried primigravida but had only single sexual partner.

ELISA testing was offered to the sexual partner of married women. Nine cases consented to undergo testing when explained wherein 8 cases turned out to be positive. Further enquiry revealed that all these men had sexual exposure to other women of high risk group.

Majority of the cases were between the age of 20 and 30 years. Out of 28 cases only 8 were using barrier contraceptives and that too infrequently. 17 cases were well aware of the mode of spread and the dreaded complications of the disease.

Examination showed in addition syphilitic lesion (3 cases), Trichomonas vaginitis (7 cases), and Venereal warts in four cases.

All the women were explained about the disease process and the effects it can have on the baby, 17 women still wanted to continue with the pregnancy.

DISCUSSION

The seroprevalence of HIV in the antenatal clinic has been found to be as high as 80.3/1000 as against 8.13 in Maharashtra state and the National figure of 7.32.

In 90% of cases the mode of transmission has been reported to be heterosexual intercourse. Sexual relation with multiple partners definitely increase the probability of getting the infection (Mann et al, 1988). In our study 57% women had history of exposure to multiple sexual partners, this groups them into high risk group which as a routine are subjected to HIV testing. But, seropositivity in 43% of women who had steady single sexual partner heterosexual contact by asymptomatic carrier has been reported (Pitchenik, 1983; Lindsay, 1989; Barbacci et al, 1991). The sexual behavior of men having unprotected sex with multiple partners increases odds of transmitting the infection to the women. As such women are more likely to get infection when compared to men during sexual activities (Campbell, 1990; deBruyn M, 1992). In our study sexual behavior of husbands where majority admitted to being exposed to either prostitutes or other female subjects were the only possible route of infection to the innocent women who were considered as low risk group. These cases otherwise would have gone undetected as also reported by Lindsay (1989) and Barbacci et al (1991).

Sexually transmitted disease is a marker of high risk behavior of either partner, this has been extensively studied all over the world. We found this association in only 30% cases.

There has been lot of controversy regarding the acceptability of HIV testing

(Maotti, 1990; Berrier, 1991; Mason, 1991; Mercey 1993) in our study 92.4% cases consented to undergo testing when explained about the disease. Lindsay et al (1989) showed that 96% women consented to undergo testing and 7 out of 10 identified cases didn't have identifiable risk behavior, which would not have been detected otherwise. This is further supported by Barbacci et al (1991). There have been controversies regarding prenatal HIV testing (Mason, 1991; Mercey, 1993; Minkoff H, 1994; Part WL, 1994). Pregnancy provides a unique opportunity for health care provider to identity infected women and institute medical therapy. Counselling these women become important regarding issues like safety of Zidovudine during pregnancy (Sperling et al, 1992) effect of infection on pregnancy outcome (Gloeb et al, 1988; Minkoff et al 1990) and risk of vertical transmission (European Collaborated Study, 1992). The infected women once identified can be educated about mode of transmission, encouraged to eliminate high risk behaviors and can be given contraception to prevent future pregnancy and the infant can be referred for better care.

As observed in the study, the epidemic is spreading not only geographically but also increasing amongst different risk group and finding its route from these core groups down to general population through sexual route. We propose that HIV screening should be extended to all the women who seek care during pregnancy.

REFERENCES

1. *Barbacci M, Repke JT, Chaisson RE. Lancet. 337; 709: 1991.*
2. *Berrier J, Preisinger J, Sperling R. AIDS-Educ-Prev. 3(2); 118: 1991.*
3. *Compbell CA : Soc. Sci. Med. 30(4); 407: 1990.*
4. *De-Bruyn M : Soc. Sci. Med. 34(3); 249: 1992.*
5. *European Collaborated Study : Lancet. 339; 1007: 1992.*
6. *Gloeb DJ; Sullivan MJ, Efantis J. : Am. J.O.G. 159;756: 1988.*
7. *Lindsay MK; Peterson IIB; Feng TI; Slade BA; Willis S; Klein L. Obstet Gynec 74; 289: 1989.*
8. *Mann JM; Nazilambi N; Piot P; Bosenge N; Kalala M.: AIDS. 2(4); 249 : 1988.*
9. *Mason J; Sperling R; Preisinger : AIDS Edu. Prev. 3(2); 100: 1991.*
10. *Mercey D. : AIDS Care. 5(2); 131 : 1993.*
11. *Minkoff IIL; Henderson C; Mendez H : Am. J.Obstet Gynec; 163; 1598: 1990.*
12. *Minkoff IIL; : Obstet. Gynec. Survey. 50(1); 2 : 1994.*
13. *Moatti JP; Le Gales C : AIDS Care. 2(3); 213: 1990.*
14. *Parks WP; : Obstet. Gynaec. Survey. 50(1); 1 : 1994.*
15. *Pitchenik AE; Fischal MA; Spina TJ. : JAMA. 250(10); 1310 : 1983.*
16. *Sperling DJ; Stratton P; Sullivan MJ. N. Eng J. Med. 36; 857 : 1992.*