

Original Research Article

Awareness of HIV/AIDS among the pregnant women and their husbands attending ANC clinic in a tertiary care centre in Chennai

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ABSTRACT

Background: In India the total number of people living with HIV (PLHIV) was estimated to be 2.1 million in 2015 and number of new cases estimated at 86,000. The prevalence of HIV among pregnant women in India is high and the awareness on HIV/AIDs is low among women in India. Awareness of HIV is important in antenatal mothers as they are vulnerable and encouraging early HIV testing will augment the PPTCT (Prevention of Parent to Child Transmission) services. Hence it is prime importance to create awareness among pregnant women to protect them from HIV infection. This study was conducted to find out the awareness level among pregnant women and their husbands as husbands play an important role in prevention of HIV in their spouses.

Methods: A cross-sectional study was conducted at ANC clinic in Sri Ramachandra Medical College, Porur, Chennai. All antenatal women who visited the ANC clinic for the first time along with their husbands were selected as the subjects. Sample size was 200 (100 couples). After obtaining Informed Consent from the subjects, a semi structured questionnaire was administered. Data was collected and analysed using SPSS software version 21.

Results: One hundred couples were included in the study. Seventy five percent of subjects did not accept that they are at risk and majority of them were husbands (79%) when compared to wives (71%). Above 75% of wives knew mother to child transmission whereas only 65% of husbands knew it. Willingness to undergo HIV test was more among wives (83%) than husbands (75%).

Conclusions: A large effort to be taken to impart the information about the HIV/AIDS to husbands to change their attitude. At least one ANC visit by pregnant women should be made mandatory to have their husbands with them to sensitise them on HIV/AIDS.

Keywords: Mother to child transmission, HIV test

INTRODUCTION

In India the total number of people living with HIV (PLHIV) was estimated to be 2.1 million in 2015 with an estimated prevalence of 0.26% among adults aged 15-49 years. Though there has been a decline in the number of new cases it was estimated that 86,000 new infections were added during the same year with 12% of the new infections occurring in children.¹ The preventive strategies under the National AIDS Control Programme

(NACP) include targeted interventions for high-risk groups and bridge population, Needle exchange programmes for injection drug users, prevention and control of sexually transmitted diseases, safer blood transfusion services, HIV counselling and testing services, prevention of parent to child transmission, condom promotion, health education and behavioural change communication, workplace intervention etc.² Increasing awareness among women and youth is an important component of the NACP. It is hence important to assess the awareness on HIV. Awareness of HIV is

important in antenatal mothers as they are the sexually active age-group and encouraging early HIV testing will augment the PPTCT services.

In a hospital-based study in New Delhi by Rahbar et al the 69% of the women are aware of the disease and 53.5% were aware of maternal to child transmission.³ In a hospital-based study by Shrotri et al in 2001 the 61-68% of the pregnant women knew mother to child transmission of HIV.⁴ In a study by Jacqueline Firth et al in antenatal clinics of two rural hospitals in Vellore only 39% of the women were aware about all the modes of transmission and knowledge on preventing mother to child transmission by medication was known only to 13% of the antenatal women.⁵

In Tamil Nadu new infections was estimated at 3000-4000 and the prevalence of HIV infection at 0.26% in 2015.¹ In India, prevalence of HIV infection among pregnant women was 0.7% though India is amongst the top 10 countries in the world currently with the highest burden of pregnant women living with HIV.⁶ Sixty percent of women with HIV infection knew about parent to child transmission in Tamil Nadu.⁷ According to NFHS-4 (2015-2016) knowledge on HIV/AIDS among men was 10.9 and knowledge among women was 16.0.⁸

METHODS

A cross-sectional study was conducted at an Antenatal clinic in Sri Ramachandra Medical College & Hospital, Porur, Chennai. It is a tertiary care hospital and around 600 women visit the antenatal clinic on a daily basis. The

facility also houses an Integrated Counselling and Testing Centre (ICTC). The study was conducted between April and May month of 2015. All antenatal women who visited the Out-patient department (OPD) for the first time along with their husbands were selected as the subjects and administered a semi-structured questionnaire after obtaining Informed Consent. Questionnaire included questions on general knowledge on HIV/AIDS, its transmission, prevention and their attitude on HIV test. Data was analysed using SPSS software version 16.

RESULTS

The current study was conducted among 100 pregnant women and their husbands to find out the belief and attitude towards HIV/AIDS. The data was collected on socio-demographic factors to analyze their influence on the awareness of HIV/AIDS. Mean age of the subjects was 26.88 years (S.D. 4.746). Mean age at marriage was 24.7 (S.D. 4.25). Nearly 70% of the subjects were in the age group of 20-29 years. Subjects with education up to high school were 53%. Around 70% were from urban area and from lower class of socioeconomic status. Fifty six percent of subjects belonged to nuclear family.

Three fourth of the study subjects said that they were not at risk of contracting HIV infection. Nearly 50% were not aware that housewife is at risk of HIV infection. Above 70% of study subjects knew that HIV infected mother affect her child. Seventy five percent knew HIV infection can be prevented. Around 80% believed that HIV test is mandatory for pregnant women and were willing to do HIV test (Table 1).

Table 1: Level of knowledge of participants.

S. No.	Questions asked	Level of knowledge		
		DNK (%)	Yes (%)	No (%)
1)	Are you at risk of HIV infection?	40 (20)	10 (5)	150 (75)
2)	Will the house-wife get risk of HIV infection?	56 (28)	46 (23)	98 (49)
3)	Will the HIV mother affect her child?	29 (14.5)	143 (71.5)	28 (14)
4)	Can HIV be prevented	25 (12.5)	151 (75.5)	24 (12)
5)	Is HIV test mandatory for pregnant women?	23 (11.5)	166 (83)	11 (5.5)
6)	Are you willing to do HIV test?	19 (9.5)	158 (79)	23 (11.5)

Table 2: Age at marriage and awareness of risk of HIV infection.

Demographic factors	Are you at risk of HIV infection?		
	DNK (%)	Yes (%)	No (%)
Age at marriage			
≤21 years	16 (25.8)	5 (8.1)	41 (66.1)
>21 years	24 (17.4)	5 (3.6)	109 (79)
	P=0.126		

Among study subjects who got married at the age of above 21 years, 79% did not know that they were at risk of HIV infection. More than 80% of educated subjects knew that they are at risk of HIV infection. Above 75% of the subjects belonging to socioeconomic status of

lower class (p=0.057) did not know their risk of HIV/AIDS. Nearly 80% of study subjects from rural area did not know their risk of HIV/AIDS. Among husbands, 79% did not believe that they were at risk of HIV/AIDS. Among the subjects from joint family, 79.5% did not

know that they are at risk. Nearly 80% of husbands have no idea of their risk of HIV whereas among wives only 71% were unaware of their risk.

The study subjects with more than high school education (89.4%) were aware that housewives are at risk of HIV infection ($p=0.03$). More number of subjects belonging to lower class (25.4%) said that house wives are at risk than subjects from upper class (17.2%). Urban subjects (26.4%) seem to know the risk of house wives getting

HIV infection than rural subjects (13.5%). Almost 30% of the subjects hailing from joint family knew that house wives are at risk of HIV infection. More than 50% of wives said that house wives are not at risk of HIV infection.

Nearly ninety percent of study subjects who got married at 21 years or less, 32% of subjects with more than high school education, 86% of wives in current study said it was mandatory for pregnant women to undergo HIV test.

Table 3: Age at marriage and awareness of mother to child transmission of HIV.

Demographic factors	Whether a HIV mother affect her child		
	DNK (%)	Yes (%)	No (%)
Age at marriage			
≤21 years	3 (4.8)	51 (82.3)	9 (12.9)
>21 years	26 (18.8)	92 (66.7)	20 (14.5)
	P=0.026		

Table 4: Educational level and awareness of risk of HIV infection.

Demographic factors	Whether the respondent at risk of HIV		
	DNK (%)	Yes (%)	No (%)
Education level			
≤High school	14 (13.2)	74 (69.8)	18 (17)
>High school	11 (11.7)	77 (81.9)	6 (6.4)
	P=0.057		

Table 5: Educational level and awareness of mother to child transmission.

Demographic factors	Whether a HIV mother affect her child		
	DNK (%)	Yes (%)	No (%)
Education level			
≤High school	13 (12.3)	81 (76.4)	12 (11.3)
>High school	6 (6.4)	77 (81.9)	11 (11.7)
	P=0.36		

Table 6: Spouse status and risk of housewife getting HIV infection.

Demographic factors	Whether house-wife get HIV		
	DNK (%)	Yes (%)	No (%)
Spouse status			
Husbands	32 (32)	25 (25)	43 (43)
Wives	24 (24)	21 (21)	55 (55)
	P=0.228		

Table 7: Spouse status and awareness of mother to child transmission.

Demographic factors	Whether a HIV mother affect her child		
	DNK (%)	Yes (%)	No (%)
Spouse status			
Husbands	18 (18)	65 (65)	17 (17)
Wives	11 (11)	78 (78)	11 (11)
	P=0.125		

Table 8: Spouse status and awareness of HIV test.

Demographic factors	Whether HIV test mandatory for pregnant women		
	DNK (%)	Yes (%)	No (%)
Spouse status			
Husbands	14 (14)	80 (80)	6 (6)
Wives	9 (9)	86 (86)	5 (5)
	P=0.49		

DISCUSSION

In the current study 70% of women were in the age group of 20-29 years which is similar to the finding in the study conducted by Sarkar et al.⁹ Knowledge on transmission of HIV from infected mother to child was less (61-68%) among pregnant women in the study conducted by Shrotri et al when compared to the current study (71%).⁴ Awareness of infected mother to child transmission was high(90%) in a study conducted in Uganda in 2010 which could be due to fact that the campaign called “Healthy Baby” started in Uganda in 2008.¹⁰

In the study by Shrotri et al, only 44.6% knew about prevention of HIV which is quite less than the current study (75%).⁴ The above finding is due to the fact the current study was conducted more than a decade later than the above study. In another study by Praveena et al, 84% of pregnant women knew about mother to child transmission of HIV and 92.6% knew HIV infection is preventable which are higher than the current study.¹¹ In the current study, 81.9% of educated pregnant women more than high school level knew HIV is transmitted from infected mother to child which is less than the above study (91.7%) by Praveena et al.¹¹

In a study by Firth et al, awareness on prevention of mother to child transmission was very low due to ignorance of pregnant women from rural areas in Vellore.⁵

In a study done by Chakraborty et al, literates had full knowledge of HIV/AIDS which is similar to the current study.¹² The association of higher educational levels with higher knowledge of HIV in the current study is consistent with findings of study done by Chatterjee et al.¹³

Seventy five percent of subjects refused that they are at risk and majority of them were husbands (79%) when compared to wives (71%). Above 75% of wives knew mother to child transmission whereas only 65% of husbands knew it. Willingness to undergo HIV test was more among wives (83%) than husbands (75%). Those who were educated above high school were well aware of the risk of house wives acquiring HIV infection.

CONCLUSION

Over all perception of risk of HIV was low among the study subjects. Risk of house wives getting HIV infection was not known to many. Attitude towards HIV test was good. Many husbands were not aware of their risk when compared to wives. A large effort to be taken to impart the information about the HIV/AIDS to husbands to change their attitude .When they accompany their wives to hospital for ANC checks up they should be educated on HIV infection. At least one ANC visit by pregnant women should be made mandatory to have their husbands with them.

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