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Correlates of Awareness and Attitude Regarding HIV / AIDS Transmission in Pregnant Females Attending Tertiary Care Center of Southern Rajasthan

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ABSTRACT

Introduction: HIV causes morbidity and mortality in infants and children, pertaining to its Parent- to-child transmission (PPTCT) risk. PPTCT is responsible for 90% childhood HIV infection. Present study was done to assess the awareness regarding HIV/AIDS transmission in pregnant women and their attitude towards people living with HIV/ AIDS (PLHA).

Methodology: It was a hospital based cross-sectional study conducted on pregnant women attending antenatal clinic at M.B Hospital. 320 pregnant mothers were interviewed using a semi structured questionnaire.

Results : Out of 320 pregnant females majority were of age group 20-25 years ,68%were housewives.77% mothers knew that HIV is transmitted by sexual route.30% of the mothers thought that one could get infected by merely touching an HIV positive people. The association of knowledge score with educational status and residential status is highly significant (**p<0.001**).

Conclusion: The awareness regarding HIV/AIDS is still low, so there is a need to focus on I.E.C. activities.

Keywords: - HIV/AIDS, Awareness, Pregnant women, PLHA (People living with HIV/AIDS)

INTRODUCTION

There are approximately 33.2 million Human Immunodeficiency Virus (HIV) - infected individuals worldwide out of them nearly 22.5 million are in Sub-Saharan Africa regions. Of adult infections, 40% are in women and 15 % in individuals of 15 to 25 years of age. Prenatal infection has resulted in large number of children being born with HIV.[1]

In India the total count of individuals living with HIV was figured to be 2.1 million in 2015 with an approximated preponderance of 0.26% among adults aged 15-49 years[2]. The HIV sero-prevalence amongst pregnant women has been accounted to be between 0.5 and 3.3% in several parts of the country. However, recent trends indicate that incidence of HIV infection in women attempting antenatal care may be as high as 6% and India can await 75,000 HIV infected neonates to be born anually[3].

The preventive schemes under the National AIDS Control Program (NACP) comprises directed treatments for high-risk groups and bridge population, Needle exchange programs for injection drug users, prevention and control of sexually transmitted diseases, HIV counseling and testing services, prevention transmission from parents to child and condom promotion[4]. Raising awareness among women and youth is a significant component of the NACP. Hence, it is essential to evaluate the

knowledge on HIV. It is important to aware antenatal mothers regarding HIV as they are the sexually active age-group.[5]

The most common cause of 90% of HIV transmission among children is vertical transmission of HIV from mother.[6] Of this, breastfeeding contributes to at least 10%.[7-8]

It has been found that majority of the people in community do not have correct and accomplished knowledge about HIV/ AIDS and its prevention. India is now in the grip of supposed to type 4 pattern of AIDS epidemic which changes from high risk grip to the bridge population (clients of sex workers, STD patients) and then to general population, as a whole.[9]

It is seen that pregnant women are much receptive on health matters. So, it is important to assess their knowledge, attitude and perception regarding HIV/AIDS. For this purpose, the present study was conducted.

METHODOLOGY

A hospital based cross sectional descriptive study conducted at Maharana Bhupal Hospital associated with R.N.T. Medical College, Udaipur District, Rajasthan after taking permission from the institute head and approval from Ethical Committee. Study Respondents were pregnant women attending antenatal clinic of M B Hospital during the study period. Three hundred and twenty pregnant women were interviewed during the study period after taking their informed verbal consent. A Pretested, semi structured closed ended questionnaire was prepared in Hindi language. The questionnaire consisted of 24 questions with regard to the awareness of the modes of transmission of HIV/AIDS (nine questions) and questions to assess the attitude toward PLWHA (14 questions). A scoring scale developed to assess knowledge and attitude scores. Those who scored more than 75% were graded as having good knowledge and attitude, those who scored between 60%-75% were graded as having average knowledge and those who scored below 60% were graded as below average knowledge and attitude. Data Analysis was done with MS-Excel and Epi-Info-7 software. Pearson's chi- squared test was applied as test of significance while assessing various correlates, p value <0.05 was considered statistically significant.

RESULTS

The present study was conducted among 320 pregnant women attending antenatal clinic of M.B. Hospital to assess the awareness and attitude towards HIV/AIDS. The data was collected on socio-demographic factors to analyze their influence on the awareness of HIV/AIDS.

Maximum numbers of patients were from age group 21-30 years. Mostly women were housewives (68.1%) and had education status was below secondary level (85%). These women were mainly from rural areas (Table: 1).

More than fifty percent subjects got information about HIV/AIDS from health personnel, 43.8% women have the source of information was television. Source of information for rest of the subject were friends (26.5%), radio (15.6%) and others (18.4%) (Table: 2).

Majority of subjects 128 (40%) had little or no knowledge about AIDS and its mode of transmission. Only 31.3% had significant knowledge about infection, its transmission and consequences (Table: 3).

44.5% subjects who completed their education up to secondary level have poor knowledge about HIV/AIDS, 30.5% subjects have average in their knowledge level and only 25% have good knowledge about AIDS. Similarly, 66.6% subjects who have education higher than secondary education were well aware about the pros and cons of AIDS (Table 3). The association between education level of pregnant women and their knowledge is highly significant $p<0.001$.

Only 14.5% of subject from rural areas have good knowledge, 60.5% subjects have poor knowledge about HIV/AIDS. Similarly, 63.6% subjects from urban areas have good knowledge. The association between education level of pregnant women and their knowledge is highly significant $p<0.001$.

Similarly the difference between residential status and knowledge score is also highly significant ($p<0.001$) (Table 4).

Table:1 Socio-demographic profile of the subjects. (n=320)

Socio-demographic profile	Women (%)
Age groups (in years)	
<20	45 (14.1)
21-30	198 (61.8)
>31	77 (24.1)
Occupation	
Housewives	218 (68.1)
Working	102 (31.9)
Educational status	
<secondary	272 (85)
>secondary	48 (15)
Residential status	
Rural	180 (56.2)
Urban	140 (43.8)

Table 2: Source of information among pregnant women about HIV/AIDS transmission

Source of information	Women (%)
Radio	50 (15.6)
Television	140 (43.8)
Health Personnel	205 (64.3)
Friends	85 (26.5)
Others	59 (18.4)

Table: 3 Knowledge Score of women regarding HIV/AIDS transmission.

Knowledge score	Women (%)
Good	100 (31.3)
Average	92 (28.7)
Below average	128 (40)

Here, in 76.8% subject were aware that unsafe sex was one of the most common mode of transmission HIV, 76.2% women aware about transmission of HIV virus from mother to their children, 65% women consider that sharing contaminated needle can cause HIV/AIDS, 38.4% were aware about infection by contaminated blood transfusion, 42.8% women were aware about transmission of HIV virus to babies through breast feeding. 27.8%, 18.1%, and 6.8% subject consider that HIV can be transmitted by touching, sharing utensils and mosquito bites.

As regarding attitude 41.3% subjects have average attitude regarding PLHA, 39.3% subjects have bad attitude and only 19.4% women have good attitude towards PLHA.

Table: 4 Association between education level and residential status of pregnant women and their knowledge.

Knowledge Score	Below Secondary Education (N=272) (%)	Secondary Education or above (N=48) (%)	Rural (N=180) (%)	Urban (N=140) (%)
Good	68 (25)	32 (66.6)	26 (14.5)	89 (63.6)
Average	83 (30.5)	9 (18.7)	109 (60.5)	36 (25.7)
Below average	121 (44.5)	7 (14.6)	45 (25)	15 (10.7)
P-value	χ^2=33.751 ,df=2, P- value=0.00001		χ^2=68.409 ,df=2, P- value=0.0001	

Figures in parenthesis are percentage.

Table: 5 Awareness of pregnant women about mode of transmission of HIV/AIDS.

Mode of transmission	Education status of respondents			P-value
	Below Secondary Education (N=272) (%)	Secondary Education or above (N=48) (%)	Total (N=320)	
Unsafe sex	205 (75.4)	41 (85.4)	246 (76.8)	0.128
Mother to child	206 (75.7)	38 (79)	244 (76.2)	0.607
Needle sharing	175 (64.3)	33 (68.7)	208 (65)	0.555
Mosquito bites	20 (7.4)	2 (4.2)	22 (6.8)	0.421
Blood transfusion	101 (37.1)	22 (45.2)	123 (38.4)	0.253
Breast Feeding	110 (40.4)	27 (56.2)	137 (42.8)	**0.041**
Touching	77 (28.3)	12 (25)	89 (27.8)	0.637
Sharing utensils	50 (18.4)	8 (16.6)	58 (18.1)	0.776

Table: 6 Attitude of pregnant women towards people with HIV/AIDS.

Attitude	Education status of respondents		P-value
	Below Secondary Education (N=272)	Secondary Education or above (N=48)	
PLHA are threat to society	189 (69.5)	32 (66.6)	0.697
Would you take care of an HIV + person	130 (47.8)	29 (60.4)	0.107
Would you stop shopping if owner of shop is HIV +	163 (59.9)	19 (39.6)	**0.009**
Would you dismiss your HIV+ maid	196 (72.0)	31 (64.6)	0.293
Should infected children be allowed in regular school	145 (53.3)	34 (70.8)	**0.024**
Should HIV+ be allowed to attend social functions	182 (66.9)	41 (85.4)	**0.010**

Figures in parenthesis are percentage

66.6% study subjects with more than high school education and 69.5% subjects with education below secondary level consider PLHA as threat to society, 60.4% study subjects with more than high school education and 47.8% subjects with education below secondary level show concern about the care of HIV+ person, 64.6% study subjects with more than high school education and 72%% subjects with education below secondary level said that they would dismiss their HIV+ maid but this type of attitude among education status of subject is not a significant (p-value >0.005). In contrast to

above 70.8% study subjects with more than high school education and 53.3% subjects with education below secondary level consider that their infected children should be allowed in regular school and finally, 85.4% study subjects with more than high school education and 66.9% subjects with education below secondary level consider that HIV+ person should be allowed to attend social functions, 39.6% study subjects with more than high school education and 59.9% subjects with education below secondary level consider that HIV+ person would stop shopping if owner of shop is HIV+. This type of attitude toward HIV among higher educated subject and lower educated subject has statistically significant difference (p-value<0.05).

DISCUSSION

In the current study (Table: 1) 62% 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[10] and Shanthi Edward also has similar findings .[5] In our study mostly women were housewives and education level was upto secondary or below. But in contrast to this study conducted by Tasfaye et al found that most of the women were employed, either they were in government sector or private sector, or education levels were above secondary level.[11] The reason may be due to the geographical distinction and awareness about study and self-dependent attitude.

Table 2 shows the most common source of information was health personnel (64.3%) and then television and friends. In contrast with this, the study conducted by Adeneye et al found that most common source of information about HIV/AIDS was radio (52%) and then television and friends.[12] This confirms the results of the National AIDS Control Organization relating to the adequate provision of HIV/AIDS information in of antenatal care in the country. In a study conducted by Abiodun et al, they also found that most common source of information about HIV/AIDS is health workers.[13]

Table 4 represents the association between socio–economic variables, education level and correct knowledge of patients on HIV/AIDS. The association of knowledge score with educational status and residential status is highly significant (**p<0.001**). Correct knowledge of patients varied by region and type of residence. Residing in urban area, having primary education and above, having higher wealth household, and being exposed to mass media were positively associated with women's correct knowledge. Subjects from urban areas have good knowledge about AIDS as compared to rural areas. These results support similar findings from a study conducted by Luba et al also found that higher proportion of respondents from city (57.2%) had correct knowledge as compared to those from emerging regions (25.5%), and rural area (23.3%).[14] Poor access and due to limited access of infrastructures like health facilities, schools, roads, distance from the central government and limited access of media coverage in emerging regions could be possible reasons.

About 65%-75% subject were aware that unsafe sex, needle sharing, blood transfusion and mother to child were the commonest mode of transmission. But, our data suggest that there are still some misconceptions about HIV transmission. Nearly 51% study subjects thought that virus may be transmitted by mosquito bites, by touching and sharing utensils. In line with this a study conducted by Bissek et al found similar results. However, they do observe a progressive reduction in the proportion of subjects with these misconceptions from 2004 through 2006: 72% and 72% respectively in 2004, 45% and 35% respectively in 2006 probably resulting from the huge efforts made over the years in health education.[15]

Our data suggest that attitude towards threat to society, care of an HIV + person and dismiss HIV+ maid among high education status of subject and lower education status of subject is not a significant (p-value >0.005). But attitude towards stopping shopping if owner of shop is HIV +, infected children be allowed in regular school or not, Should HIV+ be allowed to attend social functions among higher educated subject and lower educated subject has statistically significant difference (**p-value<0.05**). In contrast with this, a study taken by Haffejee et al found that 13% had been treated badly by a health worker because of their status. 13% respondents also reported losing their job, one indicated that she had been denied care by her family, one had been rejected by her family and another reported that she had been treated badly at work/ school. Some respondents indicated that they had been abused by their partners because of their status (20% and another 20% had experienced a break-up of their relationship because of their status. Some respondents reported losing their friends because of their status.[16]

CONCLUSION

In general, some of the determinations of this study are logical with what had antecedently been described. Consequently all of the mothers knew about prevention of mother-to-child transmission of HIV and had good attitude towards it. Over all perception of risk of HIV was low among the study subjects. Risk of housewives getting HIV infection was not known to many.

RECOMMENDATION

The needs of pregnant women for good-quality antenatal care will be prioritized and adequately addressed, especially now that this forms one objective in the Plan of Action for the health-sector reform initiative. We urge that this be done while addressing other systemic problems that have undermined past efforts to realize formal commitments to providing primary healthcare for all in the country.

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