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Januar Press	Original Research Paper	Statistics
International RE	A STATISTICAL STUDY TO ACCESS AWARENESS GARDING HIV / AIDS TRANSMISSION IN WOMEN A HEALTH TRAINING CENTRE OF UDAIPUR IN SOUTH	AND ATTITUDE ATTENDING URBAN HERN RAJASTHAN
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ABSTRACT INTRODU	ICTION: 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. Existing study was done to measure the awareness regarding HIV/AIDS transmission in women and their attitude towards people living with HIV/AIDS (PLHA). METHODOLOGY: It was a facility based cross-sectional study conducted on women attending general OPD at Urban health training centre (UHTC) attached with MB Hospital & R.N.T Medical College, Udaipur. 360 women interviewed by a semi structured questionnaire for duration of 6 months.

RESULTS: Out of 360 women majority were of age group 21-30 years ,64.4% were housewives.79.7% women knew that HIV is transmitted by sexual route. 29.4% of the mothers thought that one could get infected by just touching an HIV positive people. The association of knowledge score with educational status and occupation is highly significant (p < 0.001).

KEYWORDS : HIV/AIDS , HIV Awareness, PLHA (People living with HIV/AIDS)

### INTRODUCTION

There are around 33.2 million Human Immunodeficiency Virus (HIV) - infected individuals worldwide out of them approximately 22.5 million are in Sub-Saharan Africa regions. Of adult infections, 40% are in women and 15 % in individuals of 15-25 years of age. Prenatal infection has caused in large number of children being born with HIV.<sup>1</sup> Now As per the report, in 2017, India had around 21.40 lakh people living with HIV (PLHIV) with adult prevalence of 0.22%. among adults aged 15-49 years<sup>2</sup>. The HIV sero-prevalence amongst women has been accounted to be between 0.14 and 0.25% in several parts of the country.<sup>2</sup> However, recent trends shows 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<sup>3</sup>. The precautionary schemes under the National AIDS Control Program (NACP) comprises directed treatments for high-risk groups (HRG) and bridge population, Needle exchange programs for injective drug users, prevention and control of sexually transmitted diseases(STD's), HIV counseling and testing services, prevention of transmission from parents to child(PPTCT) and condom promotion<sup>4</sup>. Raising awareness among women and youth is a important component of the NACP. Hence, it is important to evaluate the knowledge on HIV. It is important to aware women regarding HIV as they are the sexually active age-group.<sup>5</sup> The most common cause of 90% of HIV transmission among children is vertical transmission of HIV from mother,<sup>6</sup> and breastfeeding contributes to at least 10 %.<sup>74</sup> It has been found that majority of the people in community do not have accurate and accomplished knowledge about HIV/ AIDS and its prevention. India is now in the clutch of supposed to type 4 pattern of AIDS epidemic which changes from high risk grip to the bridge population (clients of sex workers and STD patients) and then to general population, as a whole.<sup>9</sup> It is seen that women are much accessible on health matters. So, it is important to assess their knowledge, attitude and perception concerning HIV/AIDS. For this purpose, the current study was conducted.

### **METHODOLOGY:**

A facility based (health centre) based cross sectional descriptive study conducted at Urban Health Training Centre, field practice area of Community Medicine, R.N.T. Medical College and attached M.B Hospital , Udaipur District, Rajasthan after taking permission from the institute head. Study Respondents were women attending OPD of UHTC. Three hundred and sixty women were interviewed during the study period after taking their informed verbal consent. A Pretested, semi structured closed ended questionnaire was prepared in local (Hindi) language. The questionnaire enclosed of 24 questions with respect to the awareness of the modes of transmission of HIV/AIDS (nine questions) and questions to evaluate the attitude toward PLWHA (14 questions). A scoring scale developed to evaluate knowledge and attitude scores. Those who scored more than 75% were categorized as having good knowledge and attitude, those who get scored between 60%-75% were categorized as having average knowledge and those who scored below 60% were categorized as below average knowledge and attitude. Data Analysis was done with Microsoft Excel and Epi-Info-7 software. Pearson's chi- squared test was applied as test of significance. p value <0.05 was considered as statistically significant.

### RESULT

The present study was conducted among 360 pregnant women attending UHTC to evaluate the awareness and attitude to wards HIV/AIDS. The data was collected on sociodemographic factors to analyse their effect on the awareness of HIV/AIDS. Maximum numbers of women 60% were from age group 21-30 years. Majority of women were housewives (64.4%) and had education status was secondary and above level (73.3%) (Table 1). More than 50% subjects got information about HIV/AIDS from health personnel, 48.3% women have the source of information was television. Source of information for rest of the subject were friends/Relative (25%), radio (18.1%) and others (17.2%) (Table: 2). Majority of subjects 137 (38.1%) had significant knowledge about infection, its transmission and consequences. 34.7% had little or no knowledge about AIDS and its mode of transmission (Table: 3). 47.9% subjects who completed their education up to secondary level have poor knowledge about HIV/AIDS, 18.8% subjects have average knowledge level and only 33.3% have good knowledge about AIDS. Similarly, 67.4% subjects who have education higher than secondary education were well aware about HIV/ AIDS. On the other hand 48.3% of the

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Housewives had less knowledge about transmission of HIV/AIDS, while 64.1% of the women had well aware about the pros and cons of HIV/AIDS in service class women (Table 4). The association between education level of women and occupation status of the women with their knowledge is highly significant (p<0.001) (Table 4).

# Table 1 Socio-demographic profile of the women attending OPD

Age Groups ( in Years)	Women (%)
≤20	54(14.7)
21-30	204(60.0)
≥31	90(25.3)
Occupation	
Housewives	232(64.4)
working	128(35.6)
Educational Status	
<secondary< td=""><td>96(26.7)</td></secondary<>	96(26.7)
≥ secondary	264(73.3)

# Table 2. Source of Information among women about transmi ssion of HIV/AIDS

Source of information	No of Women (%)
Radio	65(18.1)
Television	174(48.3)
Health personal	212(58.9)
Friends/Relative	90(25)
other	62(17.2)

# Table3. Knowledge score of women regarding transmission of HIV/AIDS

Knowledge Score	No of Women
Good	137(38.1)
Average	98(27.2)
below Average	125(34.7)

# Table 4. Association between educational status and occupation of women

Knowledge	Educational Status		Occupation Status	
Score	below	Secondary	Housewives	Service
	Secondary	Education or		
	Education	above		
Good	32(33.3)	178(67.4)	55(23.7)	82(64.1)
Average	18(18.8)	50(18.9)	65(28.0)	33(25.8)
Below	46(47.9)	36(13.6)	112(48.3)	13(10.2)
Average				
χ2	50.348		69.973	
df	2		2	
P Value	< 0.001		< 0.001	

Further, in 79.7% women were aware that unsafe sex was one of the most common mode of transmission HIV/AIDS, 80.3% women aware about transmission of HIV virus from mother to their children, 72.2% women aware that sharing contam inat ed needle can cause HIV/AIDS, 50.8% were aware about infection by contaminated blood transfusion, 56.9% women were aware about transmission of HIV virus to babies through breast feeding. 29.4%, 36.4%, and 30 % subject consider that HIV can be transmitted by touching, sharing utensils and mosquito bites (Table 5).

Regarding attitude only 26.9% women have good attitude towards PLHA. 37.5% women have average attitude regarding PLHA, 35.6% subjects have bad attitude towards PLHA.

67.4% study women with education level secondary or above

and 75.0% women with education below secondary level reported that PLHA as threat to society this type of attitude among education status of women is not a significant (p-value >0.05), 57.6% study women with education level secondary or above level and 49.0% women with education below secondary level show concern about the care of HIV+ person, 47.0% study women with education level secondary or above and 60.4% subjects with education below secondary level consider that HIV positive women would stop shopping if owner of shop is HIV Positive . This type of attitude toward HIV among higher educated women and lower educated women has statistically significant difference (p-value<0.05). 56.1% women with education level secondary or above and 81.3% women with education below secondary level consider that they would dismiss their HIV positive maid. 73.9% of women with education level secondary or above and 56.3% women with education below secondary level consider that infected children should be allowed in regular school and finally, 81.1% women with education level secondary or above and 54.2% of women with education below secondary level said that HIV+ person should be allowed to attend social functions.

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

	Educational Status			
Mode of	Below	Secondary	Total	P Value
transmission	Secondary	Education	(N=360)	
	Education	or above	(%)	
	(N=96)(%)	(N=264)(%)		
Unsafe Sex	73(76.0)	214(81.1)	287(79.7)	0.294
Mother to child	69(71.9)	220(83.3)	289(80.3)	0.015
Sharing of needle	62(64.6)	198(75.0)	260(72.2)	0.051
Mosquito bites	16(16.7)	92(34.8)	108(30.0)	0.0001
Blood	38(39.6)	145(54.9)	183(50.8)	0.0100
transfusion				
Breast	37(38.5)	168(63.6)	205(56.9)	0.0002
Feeding				
Touching	42(43.8)	64(24.2)	106(29.4)	0.0003
Sharing of utensils	49(51.0)	82(31.1)	131(36.4)	0.0005

## Table 6. Attitude of women towards People living with HIV/AIDS

	Educational Status		
Attitude	below Secondary Education (N=96)	Secondary Education or above N=264)(%)	P Value
PLHA are threat to society	72(75.0)	178(67.4)	0.167
Would you take care of an HIV + person	47(49.0)	152(57.6)	0.146
Would you stop shopping if owner of shop is HIV +	58(60.4)	124(47.0)	0.024
Would you dismiss your HIV+ maid	78(81.3)	148(56.1)	0.0001
Should infected children be allowed in regular school	54(56.3)	195(73.9)	0.0013
Should HIV+ be allowed to attend social functions	52(54.2)	214(81.1)	0.0001

#### DISCUSSION

In the present study (Table: 1) 60% of women were in the age

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group of 21-30 years which is similar to the finding in the study conducted by Sarkar et al<sup>10</sup>, Shanthi Edward also has similar findings<sup>5</sup> and Reja R et al<sup>17</sup>. In current study majority of women were housewives and education level was upto secondary or above. Which is similar to 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.<sup>11</sup> The motive may be due to the geographical difference and awareness about study and self-dependent attitude. Table 2 shows the most common source of information was health personnel (58.9%) 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.<sup>12</sup> 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 by health personal. 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 represent the association between, occupation status, education level and exact knowledge of women on HIV/AIDS. The association of knowledge score with educational status and occupational status is highly significant (p<0.001) Exact knowledge of women varied by educational and occupation status, mothe rs having educational level secondary and above and women service class women being exposed to mass media were positively related with women's correct knowledge. 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.<sup>14</sup> About 65%-85% 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 30% 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.<sup>15</sup> A another study Reja R et al found same result on awareness of pregnant women about mode of transmission of HIV/AIDS.<sup>17</sup> The current study suggest that attitude towards threat to society, care of an HIV positive person among education status is not a significant (p-value >0.005). But attitude towards dismiss HIV Positive maid, stopping shopping if owner of shop is HIV positive , infected children be allowed in regular school, Should HIV positive be allowed to attend social functions among educated Status were statistically significant (pvalue < 0.05). These results support similar findings from a study conducted by Reja R et αl.

In disparity a study by Haffejee et al<sup>16</sup> found that 13% had been treated poorly by a health worker because of their status. 13% respondents reported losing their job also, one respondent point out that she had been denied care by her family, one respondent 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.<sup>16</sup>

### CONCLUSION

Overall, some of the determinations of the study are complete with what had precursor been described. Subsequently all of the women knew about prevention of mother-to-child transmission of HIV/AIDS and had good attitude towards it. General perception of risk of HIV was low among the women's . Risk of housewives getting HIV infection was not well-known to many.

#### RECOMMENDATION

The requirements of women for good-quality health care will be prioritized and adequately addressed, particularly now that this forms one objective in the Plan of Action for the healthsector transformation initiative. We wish that this be done while addressing other general problems that have undermined past efforts to realize formal assurances to providing primary healthcare for all in the country.

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