# A Study on Awareness and Attitude of Women of Reproductive age group towards HIV/AIDS in Rural Field Practice Area of Shivamogga

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#### **Abstract**

Introduction: The Acquired Immuno-Deficiency Syndrome (AIDS) is emerging as one of the major public health problems in India. It is rapidly diffusing into the "general population" and particularly women are found to be more vulnerable to contract HIV/AIDS and other Sexually Transmitted infections (STI) within the context of marriage. This could be due to inadequate knowledge and awareness regarding HIV/AIDS and its modes of transmission and HIV related stigma and discrimination. Objectives: To assess awareness of women of reproductive age group about modes of transmission of HIV/AIDS and to assess the attitude of women of reproductive age group towards Patients Living With HIV/AIDS (PLWHA). Methods: The study was conducted in rural field practice area of Shivamogga institute of medical sciences, Shivamogga. All the households were covered and one woman between 15-45 years age group from each house, willing to participate was included. Data was collected after informed consent using pre-tested semi-structured questionnaire and analyzed in SPSS 21. Results: Out of 150, Majority of the women were aware that unsafe sex (69.3%), Needle sharing (70.7%), Breast feeding (55.5%) are the possible ways of transmission of HIV. Illiterates and women with education ≤10th standard had less awareness about modes of transmission and showed discriminatory attitude towards HIV positive people. Conclusion: Based on the results, we conclude that the level of education has an impact in understanding the modes of transmission and changing the attitudes of public towards PLWHA. Hence there is increased need for educating more and more women especially in rural areas and strengthening of IEC activities.

**Keywords:** HIV/AIDS; PLWHA; Awareness; Attitude.

## Introduction

The Acquired Immuno-Deficiency Syndrome (AIDS) is emerging as one of the major public health problems in India [1]. There were approximately 36.7 (34.0–39.8) million people living with HIV/AIDS at the end of 2015 with 2.1 (1.8–2.4) million people becoming newly infected with HIV globally. In 2015, 1.1 (940 000–1.3 million) million people died from HIV/AIDS related causes [2]. India has the third largest HIV epidemic in the world. Karnataka is one of the six states with highest HIV prevalence [3]. The

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E-mail: kanchan.jirobe@gmail.com Received on: February 14, 2018 Accepted on: February 24, 2018 HIV epidemic in India is no longer confined to specific sub-populations such as commercial sex workers, truck drivers, and injectable drug users. It is rapidly diffusing into the "general population" and particularly women are found to be more vulnerable to contract HIV/AIDS and other Sexually Transmitted infections (STI) within the context of marriage.

This could be due to economic dependency along with illiteracy, ignorance and inadequate knowledge regarding HIV/AIDS and its modes of transmission, preventive measures especially among rural women. In India, women account for around one million out of 2.5 million estimated number of people living with HIV/AIDS [4]. Women are biologically more prone to HIV infection than men in terms of any single act of unprotected sex with an infected partner. Data from number of studies suggest that male to female transmission is about twice as likely in comparison to female to male transmission [5].

HIV-related stigma and discrimination remains as great barrier to effectively fighting the HIV and AIDS epidemic. Stigmatization would make people hesitant to get the test done and therefore, more PLWHA are unaware that they are suffering from HIV/AIDS, and are there by putting his/her sexual partners at risk of getting infected, due to lack of precautionary measures [6].

Most of the studies done in India had focused on high risk group or some single-key population [7,8,9]. The only way to control the spread is by increasing awareness regarding the modes of spread and preventive measures among people, particularly women belonging to sexually active age groups [10]. Thus this study was carried out to assess the level of awareness among the women of reproductive age group about HIV/AIDS, along with their attitude towards patients living with HIV/AIDS (PLWHA).

#### Materials and Methods

A community based cross-sectional study was conducted in a rural field practice area of Department of Community Medicine, Shimoga Institute of Medical Sciences in the month of December 2016. Out of three subcentres, one was selected randomly and all the households in that area were covered. One woman between 15-45 years age group from each household selected randomly, willing to participate was included in the study. The purpose and nature of the study was explained to the participants and informed consent was obtained. Data was collected using pretested semi structured questionnaire consisting of socio demographic variables, questions regarding modes of transmission of HIV and attitude towards PLWHA.

Out of 167 households we could access only 150, as seventeen households were locked even after two visits and they were excluded from the study. Ethical approval was obtained from institutional ethical committee.

Data was analysed using SPSS version 21. Chi-square test was used to compare the awareness and attitude towards PLWHA across the educational category and p value <0.05 was considered statistically significant. The educational status was categorised into uneducated,  $\leq 10^{\text{th}}$  standard and >10<sup>th</sup> standard.

#### Result

Out of 150 women, majority of the women (51.3%) were in the age group of 36-45 years. About 17.3% of them were uneducated, 65.4% were educated till 10<sup>th</sup> standard and below and 17.3% were educated > 10<sup>th</sup> standard. Around 88% were married and 39.4% were housewives. Majority of them were Hindus (74%) and about 87.3% belonged to lower socio-economic class (Table 1).

Awareness of modes of transmission among study subjects is shown in Table 2. About 69.3% of the respondents were aware of unsafe sex as the most common mode of transmission. About 70.7%, 55.3% and 43.3% of the women reported that HIV can be transmitted through needle sharing, breast feeding and blood transfusion respectively. It is noticeable that few of the study subjects stated that infection spreads through mosquito bites (42%), public toilets (28.7%), sharing utensils (26.7%) and by touching an infected person (16.7%). Around

<b>Table 1:</b> Socio-demographic profile of study population
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Socio-demograph	No (%)		
Age (years)	15-25	27 (18.0)	
,	26-35	46 (30.7)	
	36-45	77 (51.3)	
Education	Uneducated	26 (17.3)	
	≤ 10 <sup>th</sup> standard	98 (65.4)	
	> 10 <sup>th</sup> standard	26 (17.3)	
Occupation	Working	91 (60.6)	
	Housewife	59 (39.4)	
Marriage	Single	14 (9.3)	
0	Married	132 (88.0)	
	Widowed	04 (2.7)	
Socio-economic class	Upper	19 (12.7)	
	Lower	131 (87.3)	
Religion	Hindu	111 (74.0)	
O	Muslim	39 (26.0)	

25% of the participants expressed that only urban people will contract HIV. There was a significant difference in awareness levels of modes of transmission (unsafe sex, blood transfusion, needle sharing, breast feeding and mosquito bite) among three educational categories which was slightly high among women educated more than 10<sup>th</sup> standard (p<0.05).

Attitude of the study participants towards PLWHA is displayed in Table 3. About 75.3% of the study population stated that they would help an accident victim if he/she is HIV/AIDS positive. About 46.7% were of the opinion that they are threat to a society and they deserve to suffer. Around 44.7% and 44% of the respondents stated that they will advise their spouse to divorce PLWHA and they would be anxious and feel uncomfortable if

their child's classmate is positive. Around 43% opined that the names of infected persons should be made public. It is appreciable that only 17.3% of the participants replied that they would support a HIV infected person to get married. Around 34% and 34.7% of the women reported that they would hesitate to sit next to the infected person and stop shopping if the shopkeeper is found to be HIV/AIDS positive respectively. Surprisingly 71.3% and 64.7% opined that infected children should be allowed in regular schools and patients should be allowed to attend social functions respectively. There was significant difference in the attitude towards PLWHA among the three educational categories and women studied more than 10th standard were of moderately positive attitude towards PLWHA (p<0.05).

Table 2: Awareness and misconception among reproductive age-group women about mode of spread of HIV/AIDS

Mode of transmission	Uneducated No. (%)	≤10 <sup>th</sup> standard No. (%)	>10 <sup>th</sup> standard No. (%)	Total No. (%)	Chi square	P value
Unsafe sex	15 (57.7)	66 (67.3)	23 (88.5)	104 (69.3)	6.313	0.043
Mosquito bite	15 (57.7)	44 (44.9)	04 (15.4)	63 (42.0)	10.527	0.005
Touching	07 (26.9)	16 (16.3)	02 (7.7)	25 (16.7)	3.485	0.175
Blood transfusion	10 (38.5)	35 (35.7)	20 (76.9)	65 (43.3)	14.514	0.001
Needle sharing	14 (53.8)	69 (70.4)	23 (88.5)	106 (70.7)	7.524	0.023
Public toilets	07 (26.9)	31 (31.6)	05 (19.2)	43 (28.7)	1.592	0.451
Sharing utensils	12 (46.2)	27 (27.6)	01 (3.8)	40 (26.7)	12.012	0.002
Breast feeding	11 (42.3)	52 (53.1)	20 (76.9)	83 (55.3)	6.893	0.032
Only urban people contract HIV	06 (23.1)	26 (26.5)	05 (19.2)	37 (24.7)	0.632	0.729

Table 3: Attitude of the study subjects toward people with HIV/AIDS (PLWHA) (n=150)

Attitude	Uneducated No. (%)	≤10 <sup>th</sup> standard No. (%)	>10 <sup>th</sup> standard No. (%)	Total No. (%)	Chi square	P value
PLWHA are threat to the society	17 (65.4)	46 (46.9)	07 (26.9)	70 (46.7)	7.735	0.021
They deserve to suffer	18 (69.2)	43 (43.9)	09 (34.6)	70 (46.7)	7.142	0.028
Support a HIV infected person to get married	02 (7.7)	16 (16.3)	08 (30.8)	26 (17.3)	5.032	0.081
Would hesitate to sit next to the infected person	10 (38.5)	37 (37.8)	04 (15.4)	51 (34.0)	4.862	0.088
Advise the partner of infected person to divorce him or her	09 (34.6)	54 (55.1)	04 (15.4)	67 (44.7)	14.401	0.001
Would like to help an accident victim if he/she is HIV positive	17 (65.4)	73 (74.5)	23 (88.5)	113 (75.3)	3.834	0.147
Feels uncomfortable if their child's classmate is HIV positive	17 (65.4)	43 (43.9)	06 (23.1)	66 (44.0)	9.445	0.009
Would stop shopping if the shopkeeper HIV positive	11 (42.3)	33 (33.7)	08 (30.8)	52 (34.7)	0.887	0.642
Names of HIV infected people should be made public	12 (46.2)	43 (43.9)	09 (34.6)	64 (42.7)	0.877	0.645
HIV infected children should be allowed in regular schools	15 (57.7)	66 (67.3)	26 (100.0)	107 (71.3)	13.576	0.001
HIV infected people should be allowed to attend the social functions	14 (53.8)	62 (63.3)	21 (80.8	97 (64.7)	4.367	0.113

#### Discussion

In our study 69.3% respondents were aware of unsafe sex as the most common mode of transmission of HIV which is similar to the findings of studies by Malleshappa K (69%) [10] and Sudha R T (74.75%). Around 71% of the participants reported that HIV can also be transmitted by needle sharing which is consistent with the finding of study by Sudha R T (76.5%) [11]. Among respondents, 55.3% were aware that HIV can spread from mother to child through breast feeding which is found to be near similar to the study finding by Unnikrishnan B (48%) [6]. Only 43.3% of the study subjects knew as blood transfusion could also be one of the modes of transmission which found similar to the result of the study conducted by Zafar M (47.1%) [12].

In the present study, 42% of the participants stated that HIV can also be transmitted though mosquito bite, using common/public toilets (28.7%) and by sharing utensils (26.7%). About 16.7% told that the disease can be transmitted by touching an infected person which is in contrary with the finding given by Unnikrishnan B (33.8%) [6]. Though women were aware of unsafe sex, needle sharing, blood transfusion breastfeeding as the most common modes of transmission, few of the them opined that disease can also spread through mosquito bite, by sharing utensils, using public/common toilets and by touching. This shows that there was inadequate knowledge regarding how HIV / AIDS is not spread. There was disparity in the awareness between participants according to their educational levels and participants who had studied more than 10th standard had better knowledge and awareness regarding the modes of transmission.

In this study it was noticed that 46.7% of the study subjects opined that PLWHA are threat to the society and they deserve to suffer which were consistent with the study results of Unnikrishnan B (19% and 23.7% respectively).

Nearly 17% of them stated that they would support HIV/AIDS infected person to get married. This needs to be paid serious attention in the context of one's loved one becoming a victim of HIV/AIDS. About 44.7% replied that they will advise the spouse of the infected person to divorce him/her. It was appreciable that 75.3% of the women stated that they would help the accident victim which was similar to the finding given by Unnikrishnan B (80%) [6]. Around 35% of them told that they would stop shopping if the shopkeeper is found to be HIV positive which is consistent with the finding of the study by Sudha R

T (42%) [12] and 34% stated that they would hesitate to sit next to the HIV /AIDS infected person. It was observed that 71.3% of the participants stated that HIV infected children should be allowed in regular schools which was found similar to the result of study conducted by Unnikrishnan B (89%) [6].

But in contrary to this, 44% of the participants expressed that they would feel uncomfortable and anxious if their child's classmate is HIV positive. This could be attributed to parent's fear and concern about the safety of his/her child, with regard to injuries or mishaps that can occur during school hours. This depicts the huge gap between wanting to reduce the stigma and the actual practice of positive attitude towards PLWHA in one's routine life. It was noticed that nearly 65% of the women responded positively about allowing PLWHA to attend the social functions which was consistent with finding of study conducted by Sobhan K (81%) [13] and 42.7% expressed that the names of HIV patients should be made public because it would be helpful to prevent further transmission. When compared with participants with higher educational status, illiterates and people with lesser education had slightly discriminatory attitude towards PLWHA and this was found to be statistically significant with regard to few findings as shown in the Table 3.

Despite the good levels of awareness regarding the modes of transmission and moderately positive attitude of rural women of reproductive age-group towards PLHA, there was gap in the understanding about how HIV is not spread. It was observed from our study that awareness was more among the participants with better education level. As educational level had remarkable influence on the level of awareness of modes of transmission and the attitude of study population, a special emphasis has to be made in educating more and more women in the rural area as they are more susceptible within the context of marriage and most probably because of dependency on men. This calls a need for women's education and empowerment with respect to all the contexts in the society. Despite the various measures by government along with NGOs, the misconceptions and discriminatory attitudes toward PLHA are the major roadblocks increating better awareness about HIV /AIDS. Meanwhile more attention should be given to reduce the stigma by changing the attitudes towards PLWHA through better implementation of existing programs. Along with the efforts of the health careprofessionals it would provide a greater support to fight against AIDS globally.

#### Conclusion

Majority of the women educated above 10<sup>th</sup> standard were aware of the modes of transmission and had positive attitude towards PLWHA. Illiterates and women who were educated till 10th standard had discriminatory attitude towards PLWHA. Based on this we conclude that the level of education has an impact in understanding the modes of transmission and changing the attitudes of public towards PLWHA and the existing programs working towards HIV/AIDS will go into failure without community participation, for which a special attention has to be given by the government in educating general public with a special emphasis on reproductive age group women in rural areas as they are more vulnerable section in the society. And also there is a need for vigorous strengthening of IEC activities and policies by the government with the support from various NGOs working towards HIV/AIDS.

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