

## Awareness of HIV/AIDS among Chest Clinic Attendee in Rural Hospital Maharashtra

Dr. Prabhakar Atmaramaji Hiwarkar<sup>1</sup>, Dr. Gajanan Charandas Soyam<sup>2</sup>,  
Dr. Umesh Gajanan Kawalkar<sup>2</sup>, Dr. Umesh Shankarrao Joge<sup>2</sup>

<sup>1</sup>Professor, <sup>2</sup>Assistant Professor, Department of Community Medicine, SVN GMC Yavatmal.

Corresponding Author: Dr. Gajanan Charandas Soyam

### ABSTRACT

**Background:** Acquired Immuno Deficiency Syndrome (AIDS) caused by Human Immuno-deficiency Virus (HIV) is grave problem worldwide. Illiteracy is rampant in India; so there is low level of awareness of HIV/AIDS. So this study plans to explore awareness level about HIV/AIDS in chest clinic attendee in rural hospital, Maharashtra.

**Materials & Methods:** The present cross-sectional study was carried out among 276 chest clinic attendee from April 2016 to September 2016 to know awareness regarding HIV/AIDS, in rural hospital Maharashtra. A predesigned pretested structured questionnaire was administered by investigator. The questionnaire consisted of four sections; first section was about the socio-economic characteristics, next regarding sources of information, ways of transmission & modes of prevention of HIV/AIDS. Collected data analyzed with the help of excel. Ethical approval granted from our institutional ethical committee.

**Results:** About fifty percent study subjects were in the age group of 15 to 24 years (Mean-29.3; SD-15.1). More than half study subjects were male. Most of the study population belongs to Hindu religion followed by Muslim. Around half of study participants were illiterate & primary schooling passed. Around three fourth (71.7%) study population were from rural area. Nearly three fourth (73.6%) of our study subjects were unemployed. Most of the people (83.7%) knew information of HIV/AIDS from TV, 36.2% from poster and pamphlet, 51.4% from health care personnel, 33.3% from friends & neighbors. According to 88.4% respondents HIV infection transmitted through sexual contact, 71.4% through infected blood and 66.7% by sharing of needles. According to 67.7% HIV infection is preventable and 62.7% opined that it is curable, 68.5% participants believe that HIV status should be tested and prevention of HIV could be prevented TB infection according to 72.4% study subjects.

**Conclusion:** Even though this research data showed good knowledge among chest clinic attendee but there is gap in the knowledge in rural tribal areas. As HIV/AIDS is a sensitive issue and HIV-TB co-infection ever increasing day by day creates worst situation in India. This issue should be re-discussed once again to find out different ways to spread awareness about HIV/AIDS.

**Key words:** Awareness, knowledge, HIV/AIDS.

### INTRODUCTION

Acquired Immuno Deficiency Syndrome (AIDS) caused by Human Immuno-deficiency Virus (HIV) is grave problem worldwide. <sup>[1]</sup> As an illiteracy is widespread in India; so there is low level of

awareness of HIV/AIDS. In Indian society discussing sex has been an offensive. Also Indian people loaded with full of myths and misconceptions about sexual life. These myths propagated with the help of information from unreliable sources about

sexual intercourse, safe sex, sexually transmitted diseases (STDs), etc. Unprotected sexual practice makes them more susceptible to HIV/AIDS. To spread awareness in rural area various organizations are actively working at country level. They spread awareness across country through schools, colleges and communities about how HIV infections transmitted and what are different ways of prevention of HIV infection.<sup>[2]</sup> Not only the knowledge of the peoples' regarding mode of transmission and its prevention is very limited but also biased with mixture of facts, myths and rumors.<sup>[3]</sup> Such sort of perception also exists in different parts of the world.<sup>[4]</sup> So many studies show that HIV positive individuals are more susceptible to develop TB compared to HIV negative individuals and it is the leading cause of death among HIV positive individuals.<sup>[5]</sup> Therefore this study planned with objective to explored awareness level, mode of transmission and knowledge of prevention about HIV/AIDS in chest clinic attendee in rural hospital Yavatmal, Vidharbha Region of Maharashtra.

## **MATERIALS & METHODS**

The present cross-sectional study was carried out among 276 chest clinic attendee from April 2016 to September 2016 to know awareness & knowledge regarding HIV/AIDS, in rural hospital Yavatmal, Vidharbha region, Maharashtra, hilly and tribal area. Informed consent was obtained from each participant before commencement of the study. A predesigned pretested structured questionnaire translated in local language was used for data collection. Initially, questionnaire was pilot tested and after a few modifications the questionnaire was administered by investigator. The questionnaire consisted of four sections; first section was about the study subject's socio-economic characteristics including age, sex, education,

occupation, monthly household income etc. Second section contains sources of knowledge from which they aware of HIV/AIDS, third part consist of various causes of transmission and last section comprised of different ways of prevention of HIV infection. Collected data analyzed by investigator with the help of excel and frequency and percentages were calculated. Ethical approval granted from our institutional ethical committee.

## **RESULTS**

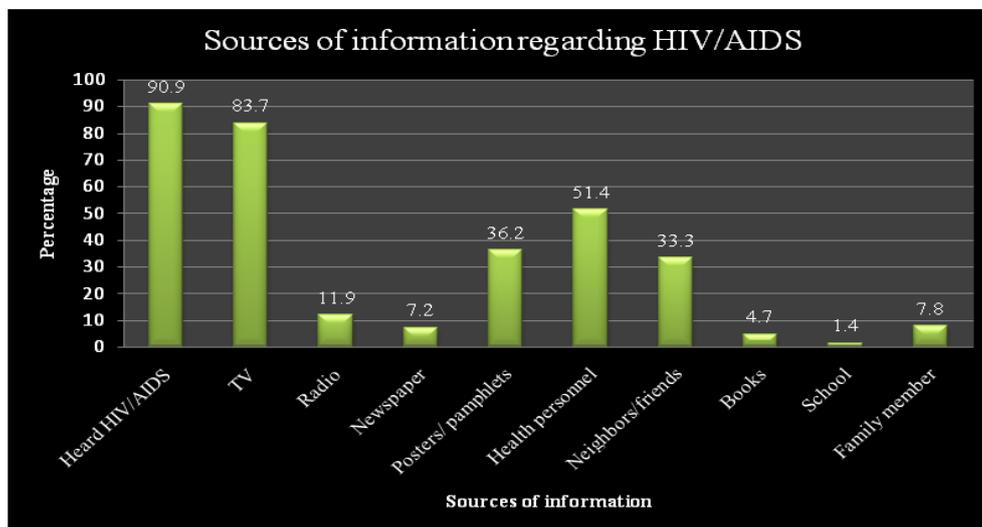
The present cross-sectional study was carried out among 276 chest clinic attendee from April 2016 to September 2016 to know awareness regarding HIV/AIDS, in rural hospital at Yavatmal.

Table no 1 showed that about half of population is of age group 15 to 24 years (Mean-29.3; SD-15.1). More than half study subjects were male. Most of the study population belongs to Hindu religion followed by Muslim. Around half of study participants were illiterate & primary school passed. Around three fourth (71.7%) study population were from rural area. Nearly three fourth (73.6%) of our study subjects were unemployed. Forty four percent (44.5%) persons among study subjects were single and almost all were married. Nearly half of people belong to 3 to 5 member family. Majority (63%) of population belongs to upper lower socioeconomic groups.

Figure no.1 depicted that knowledge received from various sources. Majority (90.9%) study subjects had heard about HIV/AIDS. Most of the people got information of HIV/AIDS from TV (83.7%), 11.9% from radio, 7.2% from newspaper, 36.2% from poster and pamphlet, 51.4% from health care personnel, 33.3% from friends & neighbors, 4.7% from books, 1.4% from schools & 7.8% from family members.

**Table 1: Socio-Demographic characteristics of study population (N=276)**

Sr.No.	Characteristics		Frequency	Percentages
1	Age in years (mean-29.3 yrs; SD=15.1)	15-24	130	47.1
		25-34	64	23.2
		35-44	31	11.2
		45 and above	51	18.5
2	Gender	Male	144	52.2
		Female	132	47.8
3	Religion	Hindu	187	67.7
		Muslim	89	32.2
		Others	4	1.5
4	Literacy	Illiterate	69	25
		Primary school	60	21.7
		Middle school	49	17.7
		High school	53	19.2
		Senior secondary	30	10.8
		Under graduation & above	15	5.4
5	Area	Rural	198	71.7
		Urban	78	28.2
6	Employment status	Unemployed	203	73.6
		Employed	73	26.4
7	Marital status	Married	129	46.7
		Single	123	44.5
		Separated	6	2.1
		Widow	18	6.5
8	No. of family member	<2	16	5.8
		3-5	136	49.2
		6-8	84	30.4
		>9	40	14.5
9	Socio-economic class	Lower class	36	13.0
		Upper lower class	175	63.4
		Lower middle class	47	17.0
		Upper middle class	15	5.4
		Upper class	3	1.0



**Figure 1: Sources of information regarding of HIV/AIDS\* (in percentages). (N=276)**  
\*Multiple answers

**Table 2: Knowledge regarding mode of HIV transmission (N=276)**

Sr. No.	Variables	KNOW		DON'T KNOW	
		Frequency	percentages	Frequency	percentages
1	Unprotected sexual contact	244	88.4	32	11.6
2	Through HIV- infected blood	198	71.7	78	18.3
3	Sharing of needle	184	66.7	92	33.3
4	Mother to child	224	81.1	52	18.8
5	Through breast feeding	202	73.2	74	26.8
6	HIV is cause of TB infection	210	76.0	66	23.9
7	Sex with multiple partners	240	86.9	36	13.0
8	Shared razor	176	63.7	100	36.2
9	Sharing food and drink	90	32.6	186	67.4
10	Mosquito bite	24	8.7	251	90.9

Table no. 2 shows various way of transmission of HIV infection. Majority of population (88.4%) were knew that HIV infection transmitted through sexual contact, 71.4% study subjects through infected blood and 66.7% by sharing of needles. 81.1%

from mother to child and 73.2% through breast milk HIV. Study subjects believed that sharing food, drinks and cloths could transmit 32.6% HIV and mosquito bite can transmit 8.7% HIV infection.

**Table 3: Knowledge about preventive measures of HIV/AIDS (N=276)**

Sr. No.	Variables	Yes		No	
		Frequency	percentages	Frequency	percentages
1	HIV/AIDS is preventable	187	67.7	89	32.2
2	HIV/AIDS is curable	173	62.7	103	37.3
3	Should HIV testing is done	189	68.5	87	31.5
4	Use of Condom	230	83.3	46	16.6
5	Avoid Sex with multiple partners	239	86.6	37	13.4
6	With safe blood transfusion	219	79.3	57	20.6
7	Health education can prevent HIV-TB	177	64.1	99	35.8
8	Prevention of HIV can prevent TB	199	72.4	77	27.8

Table no. 3 revealed that 67.7% knew that HIV infection is preventable and 62.7% opined that it is curable. Around two third (68.5%) participants believe that HIV status should be tested and by using condom HIV can be prevented according to 83.3% study subjects. Avoiding sex with multiple partners and unsafe blood transfusion can prevent HIV infection according to participants 86.6% & 79.3% respectively.

## DISCUSSION

Awareness is a crucial aspect of prevention of HIV/AIDS. Knowledge regarding HIV/ AIDS is essential for the people to live healthy sexual life and protect themselves against HIV infection. Majority (90.9%) of study subjects had heard about HIV/AIDS. Similar findings were reported in other studies conducted in other parts of India. [6-9] As compared to other studies had been taken place in different countries, ninety percent (90%) of Nepalese and 85% of Cambodian adolescents heard about HIV/AIDS. [10] Also study carried out in Nigeria, developing country like India revealed that a large proportion (86.7%) of the respondents had good knowledge of HIV/AIDS. [11] Present study showed that most of the people gain information of HIV/AIDS from TV (83.7%), 11.9% from radio, 7.2% from newspaper, 36.2% from poster and pamphlet, 4.7% from books, 1.4% from schools & 7.8% from family

members. Similar findings were observed in another study carried out in Nigeria [12] in 2009 with few differences. These differences might be due to the fact that present study carried out in the year 2016 and Nigerian study was done in the past. Our findings are contradicts with the study done by UNAIDS (2000) that 69% teenagers had heard about HIV on the radio, 5% had seen information of HIV on television, 42% from friends and classmates, 4% from teachers, 11% had read from newspaper. [13] This difference could be because of so much time lapse between two studies. Whatever differences of sources of knowledge among different studies, electronic media played key role in all studies to create awareness regarding HIV/AIDS. [12]

Majority of population were knew that HIV transmitted 88.4% through unprotected sexual act, 71.4% through infected blood, 66.7% through sharing of needles, 81.1% from mother to child, 73.2% through breast feeding. Almost three fourth (76%) respondent aware of HIV infection is the cause of TB infection. By doing sex with multiple partners' chances of getting infected with HIV is 86.9% & by sharing razor it is 63.7%. Sharing food, drink sand mosquito bite could transmit HIV 32.6% & 8.7% respectively. Comparable findings were seen in one study carried out in Kathmandu, Nepal regarding

mode of transmission of HIV/AIDS. Ninety percent (90%) students had knowledge regarding unprotected sexual act could transmit HIV. According to knowledge of students HIV infection could be occurred due to (84%) from contaminated blood products, (90%) from infected mother to child, (52%) through use of shared razors, and (94%) from contaminated needles and syringes. Also these findings are supported by the study of the UNICEF (2003).<sup>[14]</sup> So our study found out true picture of awareness & knowledge among chest clinic attendee & hence in general population.

According to knowledge of study subjects HIV infection could be prevented by using condom 83.3% in current study. Whereas rate of prevention of HIV infection by using condom were much low in another study took place in sub-Saharan African nations. This might be because of awareness campaigns are more extensive in India as compare to African country. Avoiding sex with multiple partners could prevent HIV infections, according to 86.6% of respondents in this study. Parallel responses were found in different studies carried out in Malagasy and in Uganda, Kenya, and Zimbabwe by World Health Organization.<sup>[15]</sup> Around two third (64.1%) patients who attend chest clinic knew that health education can prevent HIV & TB infections & HIV-TB co-infection. But understanding how HIV-TB could not transmitted to other person is important aspect for preventing HIV-TB co-infection.<sup>[16]</sup> Around three fourth (72.4%) respondents believed that prevention of HIV infection could prevent TB infection. As the prevalence of MDR, XDR & TDR TB increases day by day in India such kind of knowledge in patient is important. As this is cross sectional study at one point of time it has its own limitations. To know better picture further research should be planned. However, the findings of the study are intimately relevant to awareness in rural areas in India. Various awareness generation activities should be carried out particularly across unreached

and underserved rural India through various types of media campaigning.

## CONCLUSIONS

Even though this research data shows good knowledge among chest clinic attendee but there is even chance to spread knowledge in rural tribal areas through mass campaign. As HIV/AIDS is a complex issue and also HIV-TB co-infection ever increasing day by day leading crisis like situation in India. This issue could be re-discussed once again to find out different ways to handle this puzzling task.

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