



Are our women aware of HIV/AIDS? -A cross-sectional study

Ranjitha S Shetty, Sanjay Pattanshetty, Asha Kamath, Sneha Kamath

Kasturba Medical College, Manipal University, Manipal

RESEARCH

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Corresponding Author:

Dr Ranjitha S Shetty, Assistant Professor
Department of Community Medicine,
Kasturba Medical College,
Manipal University, Manipal, Udipi-Dist
Karnataka- 576 104,India
ranjithakmc@gmail.com

Abstract

Background

HIV has reduced life expectancy by more than 20 years, slowed economic growth, and deepened household poverty, and many women in the rural areas still lack complete information on how to avoid exposure to the infection.

Method

A Cross sectional study was carried out among 167 married women in the age group of 15-45 years during the month of July and August 2009 in the Rural Health Training centre of the Community Medicine department. A modified National Family Health Survey-3 (NFHS-3) questionnaire was used to collect the data and was analyzed using Statistical Package for Social Sciences (SPSS) version 11.5.

Results

Majority of the women belonged to the age group of 21 -30 years (73.7%). About 67% of them were housewives. Over 80% of the women knew about modes of transmission of HIV. Only 30% of the women were aware that HIV infection can also be present in healthy looking persons whereas 62.5% of them were unsure regarding this matter. Approximately 87(54%) respondents were aware of the anti-retroviral drugs.

Only 14% of the women had positive attitudes towards HIV positive people.

Conclusion

Misconceptions about HIV/AIDS existed although level of awareness about the infection was acceptable among the study population. This gap in the knowledge suggests the need for better awareness campaigns targeting rural women.

Key Words

AIDS, knowledge, attitude, misconceptions, rural women

Background

The Acquired Immuno-Deficiency Syndrome (AIDS) is emerging as one of the major public health problems in India. Currently 2.47 million Indians are living with Human Immunodeficiency Virus (HIV) ⁽¹⁾ which makes India the third worst HIV/AIDS-affected country after South Africa (5.5 million) and Nigeria (2.9 million) ⁽²⁾. The HIV epidemic in India is no longer geographically limited to metropolitan cities, or 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 ^(1,3,4). But still the HIV epidemic is misunderstood among the Indian public, the fact which is hindering efforts to prevent new infections.

Karnataka has been identified as one of the six high HIV prevalence states in India by using sero-prevalence among antenatal women as well as among patients attending clinics for sexually transmitted diseases as key indicators ⁽⁵⁾. Heterosexual transmission being the commonest route of transmission, 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 ⁽⁶⁾.



The present study aimed to assess the knowledge regarding HIV/AIDS among rural married women with special reference to its modes of transmission, preventive measures, and sources of information and to ascertain their attitude towards people living with HIV/AIDS.

Methods

Udupi District covers a population of 9,49,883 ⁽⁷⁾ which is situated along the coastal belt of southern Karnataka and comprises of Udupi, Kundapur and Karkala taluks. It has a high literacy rate of 81.2% with a female literacy rate of 75% and a favorable sex ratio of 1130 females per 1000 males.

A Cross sectional study was carried out during the month of July and August 2009 in the Rural Health Training centre (RHTC) of the Department of Community Medicine, Kasturba Medical College, Manipal. The study participants were married women in the age group of 15-45 years attending the centre seeking treatment for various health problems. The calculated sample size was 156, based on the prevalence of 11.6% [% of women between 14-49 years of age who have comprehensive knowledge regarding HIV/AIDS in Karnataka ⁽¹⁾], with relative precision of 5% . Finally 167 women were included in the study.

Instrument: A modified NFHS-3 questionnaire ⁽¹⁾ translated into the local language (Kannada) was used to collect the data. Prior consent was taken from the participants and they were assured of strict confidentiality of their responses. The data was collected by personal interviews by a team consisting of doctors assisted by female health workers. The data was analyzed using Statistical Package for Social Sciences (SPSS) version 11.5.

Results

One hundred and sixty seven women were interviewed in the present study. Their socio-demographic characteristics are depicted in

Table -1. Majority of the women belonged to the age group of 21 -30 years (73.7%). All the participants were literate and 67% of them were housewives.

Majority of the women (94%) were aware of a disease called HIV/AIDS. Only 30% of the women were aware

that HIV infection can also be present in healthy looking persons whereas 62.5% of the respondents were not sure regarding this matter. Fifty eight percent of the women could name at least one place where they can get themselves tested and being informed of their HIV status.

Table-1. Socio-demographic characteristics of the study population (n=167)

Characteristics		Number (%)
Age (in years)	15 -20	8 (4.7)
	21-30	123 (73.7)
	31-40	33 (19.8)
	41-45	3 (1.8)
Education	< 5 th Standard	9 (5.4)
	5 th -10 th Standard	83 (49.7)
	10 th -12 th Standard	29 (17.4)
	Graduation	46 (27.5)
Occupation	Housewives	112 (67.0)
	Working	55 (33.0)

Table-2 depicts the knowledge among study population about various modes of transmission of HIV/AIDS. Over 75% of the women knew that HIV can be transmitted through unsterile needles used for injections and blood transfusions, unprotected sex with a person who has AIDS or is HIV positive and from HIV positive mother to her child during pregnancy and delivery, only 45.5% of them agreed for the fact that HIV can also be transmitted from mother to child through breast milk. Few women (4-9%) believed that HIV can be transmitted from person-to-person by sharing towels, food, toilets, by kissing, hugging or shaking hands with a person who has AIDS or is HIV positive and through mosquito bites (24%).



Table -2: Knowledge regarding modes of transmission of HIV/AIDS among study population (n= 167)

Mode of transmission	Number (%)
Unprotected sex with an AIDS patient	138(82.6)
Unsterile needles for injections and blood transfusions	152 (91.0)
HIV positive mother to Child during pregnancy and delivery	126 (75.4)
Transmission through breast milk	76 (45.5)
Hugging an AIDS patient	7 (4.2)
Kissing an AIDS patient	30(18.0)
Shaking hands with an AIDS patient	9 (5.4)
Through mosquito bites	40 (24.0)
Sharing food with an AIDS patient	12 (7.2)
Sharing towels	14 (8.4)
Sharing toilets	6 (3.6)

The knowledge among women regarding the methods of disease prevention with respect to HIV/AIDS is shown in **Table-3**. Majority of them had an adequate knowledge about preventive measures against HIV/AIDS infection. But about 30-40% of them had misconceptions that by avoiding kissing and mosquito bites they can prevent transmission of this infection. Approximately 87(54%) respondents were aware of the anti-retroviral drugs available to control HIV infection among infected adults whereas 113 (70%) women knew about the medicines given to HIV positive antenatal mothers to prevent mother to child transmission.

Television (97.6%) was the main source of information for these women followed by radio (68.9%). In addition to this half of the study population had also received information from their teachers, husbands, friends, through adult education programs, newspapers and movies.

Majority of these women (86.2%) felt that both male and female teachers who have been diagnosed to have HIV infection but are not severely ill should be allowed to teach in schools where as 52% of them said that they would not like to keep it as a secret if any of their family member was suffering from the same. Sixty one percent of our study population was

willing to take care of their relatives having HIV infection. But only 47.8% of them said that they would buy vegetables from a shop-keeper who is HIV positive. An overall accepting attitude towards People Living With HIV/AIDS (PLWHA) was observed among 14% of the respondents.

Table 3: Knowledge regarding methods of HIV/AIDS prevention among the study population (n= 167)

Preventive measures	Number (%)
Abstaining from sex	48 (28.7)
Using condoms regularly	123 (73.7)
Being faithful to one partner	123 (73.7)
Limiting the number of sex partners	149 (89.2)
Avoiding sex with commercial sex workers	157 (94.0)
Avoiding unnecessary blood transfusions	113 (67.7)
Avoiding irrational use of injections	117 (70.1)
Using new sterilized needles for injections every time	158 (94.6)
Avoiding sharing shaving kits among men	151 (90.4)
Avoiding sex with homosexuals	131 (78.4)
Availability of drugs to prevent mother- to- child transmission	113 (70.6)
Avoiding kissing HIV patients	68 (40.7)
Avoiding mosquito bites	55 (32.9)

Discussion

The prevention and the impact of HIV/ AIDS epidemic critically depend on the knowledge among people about the disease transmission and on how it can be prevented ⁽⁸⁾. In this study we found that most of the participants (94%) had heard about a disease called HIV/AIDS which was similar to the findings reported in other studies ^(6,9,10,11). But NFHS –3⁽¹⁾ reports that only 61% of their surveyed women were aware of this disease and only 19.5% of the surveyed population had heard about HIV/AIDS in a study conducted in Kargil district of Jammu and Kashmir ⁽¹²⁾.

An important finding of our study was that 83% of the respondents knew that unprotected sex with a person



having HIV/AIDS can transmit the infection. Majority of the women (75%) had an adequate knowledge regarding various other modes of transmission for HIV, but awareness regarding mother to child transmission through breast milk was found to be unsatisfactory (45.5%) in the present study. This finding was consistent with the findings of a study conducted in Malaysia in which most of the respondents knew about the common modes of transmission for HIV, but only 54.8% of them were aware about HIV transmission through breast milk and 28% of them were found to be unsure about this fact¹⁰. Similarly in another study carried out among general public in Hyderabad⁽¹³⁾, only 43.5% of the respondents knew that HIV can be transmitted through breast feeding. In a study carried out among college students in Kerala⁽⁹⁾, most of them were aware of the common modes of HIV transmission and similar findings have been observed in other studies conducted in various parts of India^(6,14,15). These findings are in contrast to that of a study conducted in Kargil district⁽¹²⁾ in which only about 14% of the respondents could mention various modes of transmission for HIV and barely 1% knew about the possibility of vertical transmission of this infection.

A significant number of the interviewed women in the present study, even though all are literate, had misconceptions regarding HIV transmission such as transmission through sharing food, toilets, kissing and through mosquito bites. This corroborates with NFHS-3⁽¹⁾ report but the number of females who had such misconceptions was found to be much higher in a study conducted among slum dwellers in Chennai⁽¹¹⁾. Most of the women in the current study were either unaware or not sure about the fact that even a healthy looking person can be infected with HIV similar to the findings that of NFHS-3⁽¹⁾ and a study conducted among adolescent school girls in South Delhi⁽¹⁴⁾. This is a matter of concern as research findings show that a person with HIV may remain asymptomatic for several years before developing AIDS but can still transmit the infection to others during the asymptomatic period⁽¹⁶⁾.

Majority of the women in our study said that condom usage, being faithful to one partner and using sterilized needles for injections can prevent HIV infection. However, the misconceptions regarding HIV

transmission among these women have reflected on their knowledge about disease prevention, as 30-40% of them felt that avoiding kissing a person with HIV or avoiding mosquito bites would prevent them from getting the infection from others. Similar findings were reported from a study conducted on young adults in Malaysia⁽¹⁰⁾ and various studies carried out across India^(13,14,15,17).

In a study conducted in Andhra Pradesh⁽¹³⁾, 42.6% of the respondents were aware of the anti-retro viral drugs available for controlling the progression of HIV infection among HIV positive adults, but only 18.5% knew about the drugs given to HIV positive pregnant mothers to prevent vertical transmission. This is in contrast to our study in which we found more women to be aware about prevention of mother to child transmission by giving drugs compared to their awareness about controlling progression of disease among HIV positive adults by anti-retro viral therapy. Newspaper and television were the two main sources to get information about HIV/AIDS for the college students in a study conducted in Kerala. In a Malaysian study and in various Indian studies^(6,10,13,14,15) television, radio and newspaper were found to be the major sources of information the findings which are corroborating with that of our study.

The data from NFHS-3⁽¹⁾ shows that about 34% of the surveyed female population had accepting attitudes towards PLWHA while in the present study only 14% of the women expressed such attitudes on all indicators (attitude towards teachers, shop keepers and relatives having HIV/AIDS and need to maintain the secrecy about the HIV status of a family member). However, a positive attitude towards individual indicator ranges from 48% to 86% in this study which is consistent with the findings of another study conducted among people living in coastal Karnataka⁽¹⁸⁾.

Conclusion

The women in this part of Karnataka seem to be quite aware about the disease HIV/AIDS, particularly regarding its modes of transmission and preventive measures, which could be attributed to the high literacy rate in this area. This study has also tried to throw some light on women's attitude towards people living with HIV/AIDS. However, several gaps in their knowledge about the disease and surprisingly some of



the misconceptions, which still do exist in this part of the state, have also been identified in this study. These misconceptions may place them at risk for HIV infection. Hence, along with mass media which have proved to be good tools for disseminating information about HIV/AIDS, new approaches should be tried to reach the rural communities.

Our study emphasizes the need to target the women from rural areas in the efforts to raise their awareness about HIV/AIDS and its prevention. Programs should also have strategies to dispel various false conceptions that people have about HIV/AIDS especially in rural areas of the country.

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PEER REVIEW

[AMJ office use only]

CONFLICTS OF INTEREST

The authors do not have any competing interest to declare

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