

Original Research Article

Knowledge and attitude regarding HIV/AIDS among patients attending medicine outpatient department in C. C. M. Medical College and Hospital, Durg

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ABSTRACT

Background: Acquired immunodeficiency syndrome (AIDS) is one of the deadliest diseases that modern medicine has ever had to tackle. Understanding the knowledge about HIV/AIDS in general populations will help in formulating strategy for prevention and treatment. With this background, this study was conducted to assess the knowledge and awareness about HIV/AIDS among general population.

Methods: A cross sectional study was conducted at C.C.M. Medical College and Hospital, Durg during December 2018 to January 2019. The data was collected from 450 patients attending the medicine outpatient department. Study subjects were selected using convenient sampling technique. Patients giving consent and willing to participate were included in the study. The data was collected in predesigned and pretested questionnaire.

Results: 77.11% study participants were aware that unprotected sex can lead to transmission of HIV, 73.78% knew that shaking hands will not transmit the disease. 79.8% knew that use of condom can prevent transmission of HIV/AIDS. Overall males had better knowledge than females. 76.85% said they would behave friendly with people having HIV/AIDS and 69.78% were willing to take care of relatives with HIV.

Conclusions: This study indicates that majority participants have good knowledge about difference between HIV and AIDS, modes of transmission and prevention though they were not completely aware of it. The proportion of those with lack of correct knowledge though comparatively less, needs to be taken as a challenge and addressed through well planned health educational activities at various platforms including teaching hospital premises.

Keywords: HIV, AIDS, Knowledge, Attitude

INTRODUCTION

One of the deadliest diseases that modern medicine has ever had to tackle is acquired immunodeficiency syndrome (AIDS). Human immunodeficiency virus (HIV) affects immune system of body and also reduces defense functioning of body against protection from various infectious diseases. There is no cure to the disease but treatment can help delaying death of person suffering

from disease. Due to this fact it becomes necessary to educate people so they can protect themselves from getting infected. Various non-governmental organization (NGO's) and government organizations have undertaken awareness programs for HIV/AIDS.

Since the beginning of epidemic, over 70 million people have been infected with HIV and about 35 million have died of the disease. At the end of year 2017, 36.9 million

people were living with HIV, globally. It is estimated that 0.8% of adults aged 15-49 years worldwide are living with HIV.¹

A major barrier in fighting the epidemic of HIV and AIDS is HIV-related stigma and discrimination. Stigma increases when disease concerned is thought to be acquired by patient's fault entirely, for example, immoral behavior.² People living with HIV/AIDS (PLWHA) are being shunned by family and the community as a result of stigma and discrimination. Besides this, it also results in poor treatment in healthcare and educational settings, an erosion of rights and psychological damage.

There are several reasons for the stigma towards PLWHA among the general population, one of them could be inaccurate and inadequate information about the cause, source and transmission of HIV; creating irrational behavior and misperceptions of personal risks. People are hesitant to get the test done due to stigmatization, which results in unawareness of more PLWHA that they suffer from the disease and thus putting sexual partners and needle sharers at risk of getting infected.

As per the recently released, India HIV estimation 2017 report, HIV prevalence among adults (15-49 years) in India is estimated at 0.22% (0.16-0.30%) in 2017. Among males, the adult HIV prevalence is estimated at 0.25% and among females it is estimated at 0.19%. HIV prevalence at national level has been observed to decline steadily from an estimated peak of 0.38% in 2001-03 through 0.34% in 2007, 0.28% in 2012 and 0.26% in 2015 to 0.22% in 2017. The prevalence among adults as per 2017 HIV estimation report of India in Chhattisgarh is estimated at 0.20%.³

Understanding the knowledge about HIV/AIDS in general populations will help in formulating strategy for prevention and treatment. With this background, this study was conducted to assess the knowledge and awareness about HIV/AIDS among the people attending medicine outpatient department (OPD) in a tertiary care hospital of Durg.

METHODS

The present cross sectional study was conducted at C.C.M. Medical College and Hospital, Durg during December 2018 to January 2019. The data was collected from the patients attending the Medicine OPD for various health problems. Study subjects were selected using convenient sampling and a total of 450 patients participated in the study. The data was analyzed and presented in absolute numbers and percentage. Test for proportionality has been applied to check whether there is significant difference in knowledge and attitude among males and females.

Inclusion criteria

Patients giving consent and willing to participate. The data was collected in predesigned and pretested questionnaire.

RESULTS

The demographic characteristics of participants of the study show that in present study male participants were 54.9% and participation of females was 45.1%. Majority of the participants belonged to age-group 41 to 70. It is observed that less number of people was graduate and above, proportion of them being 9.1%. About a quarter of all participants were illiterate and nearly same proportion was observed with those who had secondary education. Those who had primary education were 23.3% and proportion of those with higher secondary education was 16.9% (Table 1).

In present study 65.11% of the participants knew about difference between HIV and AIDS. About 77.11% study participants had fair knowledge that unprotected sex can lead to transmission of HIV. 61.33% were aware that mosquito bite is harmless. Among all study participants 73.78% knew that shaking hands will not transmit the disease and 68.22% were of the same opinion about hugging a diseased person.

Table 1: Distribution of participants according to demographic profile (n=450).

| Particulars | No. of participants | % |
|----------------------|---------------------|-----|
| Age-group (in years) | 18-30 | 40 |
| | 30-40 | 62 |
| | 41-50 | 91 |
| | 51-60 | 102 |
| | 61-70 | 106 |
| | 71-80 | 49 |
| Gender | Male | 247 |
| | Female | 203 |
| Education | Illiterate | 113 |
| | Primary | 105 |
| | Secondary | 115 |
| | Higher secondary | 76 |
| | Graduate and above | 41 |

Table 2: Distribution of participants according to knowledge about HIV/AIDS.

| Particulars | Correct knowledge | | Incorrect knowledge | |
|--|-------------------|-------|---------------------|-------|
| | No | % | No | % |
| What is the difference between HIV and AIDS? | 293 | 65.11 | 157 | 34.89 |
| HIV can be transmitted by: | | | | |
| Unprotected sex | 347 | 77.11 | 103 | 22.89 |
| Use of infected needles | 262 | 58.22 | 188 | 41.78 |
| Mosquito bite | 276 | 61.33 | 174 | 38.67 |
| Coughing or sneezing | 267 | 59.33 | 183 | 40.67 |
| Hugging | 307 | 68.22 | 143 | 31.78 |
| Shaking hands | 332 | 73.78 | 118 | 26.22 |
| What is the test to know if a person is affected by HIV? | 213 | 47.33 | 237 | 52.67 |
| Where is HIV testing done? | 233 | 51.78 | 189 | 42.00 |
| Is there any treatment available for HIV/AIDS? | 227 | 50.44 | 223 | 49.56 |
| Where is the treatment available? | 193 | 42.89 | 257 | 57.11 |
| HIV/AIDS transmission can be prevented by | | | | |
| Testing blood before transfusion | 311 | 69.11 | 139 | 30.89 |
| Monogamous relation with uninfected partner | 339 | 75.33 | 111 | 24.67 |
| Safe injecting practices | 273 | 60.67 | 177 | 39.33 |
| Use of condoms | 359 | 79.78 | 91 | 20.22 |
| How can we prevent transmission of HIV infection from mother to child? | 302 | 67.11 | 148 | 32.89 |
| What is the relationship between TB and HIV? | 269 | 59.78 | 181 | 40.22 |
| In case of TB will you suspect for HIV? | 263 | 58.44 | 187 | 41.56 |

Table 3: Comparison of knowledge of male and female participants.

| Particulars | Correct knowledge | | | | P value |
|--|-------------------|-------|---------|-------|---------|
| | Male | | Female | | |
| | (n=247) | | (n=203) | | |
| | N | % | N | % | |
| What is the difference between HIV and AIDS? | 173 | 70.04 | 120 | 59.11 | 0.0156 |
| HIV can be transmitted by | | | | | |
| Unprotected sex | 196 | 79.35 | 151 | 74.38 | 0.2123 |
| Use of infected needle | 157 | 63.56 | 105 | 51.72 | 0.0114 |
| Mosquito bite | 152 | 61.54 | 124 | 61.08 | 0.9207 |
| Coughing or sneezing | 156 | 63.16 | 111 | 54.68 | 0.0687 |
| Hugging | 173 | 70.04 | 134 | 66.01 | 0.3614 |
| Shaking hands | 187 | 75.71 | 145 | 71.43 | 0.3049 |
| What is the test to know if a person is affected by HIV? | 132 | 53.44 | 81 | 39.90 | 0.0357 |
| Where is HIV testing done? | 139 | 56.28 | 94 | 46.31 | 0.2262 |
| Is there any treatment available for HIV/AIDS? | 138 | 55.87 | 89 | 43.84 | 0.9044 |
| Where is the treatment available? | 122 | 49.39 | 71 | 34.98 | 0.0042 |
| HIV/AIDS transmission can be prevented by | | | | | |
| Testing blood before transfusion | 176 | 71.26 | 135 | 66.50 | 0.2774 |
| Monogamous relation with uninfected partner | 183 | 74.09 | 156 | 76.85 | 0.4996 |
| Safe injecting practices | 156 | 63.16 | 117 | 57.64 | 0.2335 |
| Use of condoms | 203 | 82.19 | 156 | 76.85 | 0.1609 |
| How can we prevent transmission of HIV infection from mother to child? | 163 | 65.99 | 139 | 68.47 | 0.8038 |
| What is the relationship between TB and HIV? | 155 | 62.75 | 114 | 56.16 | 0.1565 |
| In case of TB will you suspect for HIV? | 153 | 61.94 | 110 | 54.19 | 0.0973 |

Table 4: Attitude towards PLWHA.

| Attitude towards HIV patients | Male | | Female | | P value |
|--|------|-------|--------|-------|---------|
| | Yes | % | Yes | % | |
| Allow PLWHAs to continue their routine in society | 189 | 76.52 | 152 | 74.88 | 0.4715 |
| Take care of relatives with HIV | 168 | 68.02 | 146 | 71.92 | 0.3705 |
| Behave friendly with PLWHA | 186 | 75.30 | 156 | 76.85 | 0.7020 |
| Buy grocery from shopkeeper having HIV | 178 | 72.06 | 141 | 69.46 | 0.5462 |

It is observed that use of infected needle is considered as mode of transmission by 58.2% participants while 59.3% believe that coughing or sneezing will not spread the disease. Among all participants in this study, more than 60% participants were aware that testing blood before transfusion (69.1%), monogamy (75.3%), safe use of needles (60.7%) and use of condoms (79.8%) can prevent transmission of HIV/AIDS. 67.1% participants had knowledge about prevention of disease infection from mother to child. The knowledge was better about difference between HIV and AIDS, modes of transmission and modes of prevention and relation between tuberculosis (TB) and HIV. It is observed that knowledge was not so satisfactory regarding testing of HIV and treatment availability for the disease (Table 2).

It is observed that males had better knowledge than females except for monogamous relation as a mode of prevention and prevention of HIV from mother to child, where females had a slightly better knowledge compared to males. The difference between genders was found to be statistically significant for questions on difference between HIV and AIDS, use of infected needle as mode of transmission, test to know HIV and treatment availability for the disease (Table 3).

In present study, 24.2% of all participants were of the opinion that PLWHA should be socially banned while rest 75.78% were of opinion to allow PLWHA continue their routine in society. Among all study participants, 69.78% were willing to take care of relatives with HIV. Also, 76.85% said they would behave friendly with people having the disease whereas 70.89% had no problem in buying grocery from a shopkeeper who suffered from HIV. No statistically significant difference of attitude has been observed between males and females. Also majority of participants from both groups have shown right attitude (Table 4).

DISCUSSION

In present study male and female participation were 54.9% and 45.1% respectively. Maximum number of participants belonged to age group 40-70. In a similar study by Kawale et al 48.5% were male and 51.5% were female where majority were between 21 to 40 years of age.⁴

Our study shows that 65.11% of participants know the difference between HIV and AIDS, where as a study

conducted by Vijayakrishnan et al shows comparatively better knowledge among engineering students at 71.3%.⁵ This is quite likely as we expect better knowledge about HIV/AIDS from college students.

In our study it is found that 79.78% knew about prevention of disease by use of condoms whereas a comparatively higher proportion was noted in a study by Kawale et al at 82.1%.⁴ Also, it has been observed in our study that 76.85% females had knowledge that condom prevents transmission of disease, which is higher compared to a study conducted by Lucksom et al on antenatal mothers which reported 48% of women knew condom prevents the infection.⁶ It was recorded that 77% people were aware condom prevents HIV transmission in a study conducted on social worker by Pitts et al.⁷

In our study it has been observed that 61.54%, 63.16%, 70.04% and 75.71% people were aware that mosquito bite, coughing/sneezing, hugging and shaking hands respectively does not spread HIV. Kawale et al reported in a study that 53.3% were aware about mosquito bite does not transmit disease.⁴ In a study by Vijayakrishnan et al it is noted that 76.8% of participants knew hugging does not spread the disease.⁵

In present study 69.78% respondents were willing to take care of relatives suffering from disease while 75.78% were of the opinion that PLWHA should be allowed socially with their routine whereas in other study by Kawale et al among rural people 81.6% responded that they will take care of relatives or family members and in a study by Pitts M et al. 91% respondents said that people with HIV/AIDS should be treated same as sick people.^{4,7}

CONCLUSION

This study indicates that majority participants have good knowledge about difference between HIV and AIDS. Study participants also have good knowledge about modes of transmission and prevention still they are not completely aware about spread of disease by mosquito bite, coughing or sneezing. Knowledge is not satisfactory about availability of treatment and place of treatment available. The proportion of those with lack of correct knowledge though comparatively less, needs to be taken as a challenge and addressed through well planned health educational activities at various platforms including teaching hospital premises.

Recommendations

We want to emphasize an important finding i.e., usually obtained in almost all the studies and that is the proportion of those participants who do not answer several questions correctly. With the implementation of National AIDS Control Organisation for almost last 3 decades, it is expected that everybody is aware of basic facts about HIV/AIDS. But the lack of knowledge noted in the present study ranging from 20 to 57% to different questions is regarded as a great concern and necessitates further attempts at reaching every adult in the population with correct knowledge on all basic facts on HIV/AIDS through well planned health educational activities. During the present study, all the participants were made aware of the correct knowledge on various facts about the disease through power point presentations organized in the hospital premises.

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