

Original Research Article

A study to assess awareness about HIV/AIDS among rural population of central India

Shailesh K. Kawale^{1*}, Vivek Sharma¹, Prafulla P. Thaware², Atul D. Mohankar³

¹Department of Community Medicine, ³Department of Dermatology, Venereology and Leprosy, Chhattisgarh Institute of Medical Science, Bilaspur, Chhattisgarh, India

²Department of Pharmacology, Chandulal Chandrakar Memorial Medical College, Durg, Chhattisgarh, India

Received: 25 November 2017

Revised: 15 December 2017

Accepted: 16 December 2017

*Correspondence:

Dr. Shailesh K. Kawale,

E-mail: shaileshkawale@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Prevention and control of HIV/AIDS depends on general knowledge and attitude towards HIV/AIDS. So the present study was conducted with the aim to assess knowledge, attitude, and preventive practices regarding HIV infection and AIDS among rural peoples.

Methods: A cross sectional study was conducted among peoples age more than 15 years in a villages which comes under field practice area of rural health training centre (RHTC) of our medical college. Total 396 individuals were interviewed during March 2015 to April 2015 by using predesigned and pretested questionnaire after taking written informed consent.

Results: 71.5% knows uninfected faithful partner and 82.1% thinks use of condom will prevent transmission of HIV/AIDS to their partners. 46.7% thinks mosquito bite, 37.6% thinks sharing food transmit HIV/AIDS. 83.1% knows pregnancy and 79.3% knows breastfeeding transmit HIV to their children. 61.1% willing for not to keep HIV status secret, 81.6% willing to take care of relatives having HIV, 88.6% allow HIV positive teachers to continue teaching and 68.4% will buy vegetables from HIV positive shopkeeper. 36.8% knows nearby place where condoms are available and 49.7% knows nearby place for HIV testing.

Conclusions: People have good knowledge about HIV transmission i.e. faithful partner, condom use, pregnancy and breast feeding. Still some misconceptions need to be address regarding mosquito bite and sharing food with person having HIV/AIDS. Participants have poor knowledge about nearby availability of services related to HIV/AIDS.

Keywords: Knowledge, Awareness, HIV, AIDS

INTRODUCTION

HIV continues to be a major global public health issue. Since the beginning of the epidemic, more than 70 million people have been infected with the HIV virus and about 35 million people have died of HIV.¹ In 2016, an estimated 36.7 million people were living with HIV with a global HIV prevalence of 0.8% among adults.^{2,3}

As per the India HIV estimation 2015 report, adult (15-49 years) HIV prevalence in India was estimated at 0.26% (0.22%-0.32%) in 2015. In 2015, adult HIV prevalence was estimated at 0.30% among males and at 0.22% among females. The adult HIV prevalence at national level has continued its steady decline from an estimated peak of 0.38% in 2001-03 through 0.34% in 2007 and 0.28% in 2012 to 0.26% in 2015. Similar consistent

decline were noted among males and females at the national level.⁴

As per the state fact sheet published in March 2014, adult (15-49 years) HIV prevalence in Chhattisgarh was estimated at 0.27%. Adult HIV prevalence was estimated at 0.32% among males and at 0.22% among females.⁵

All over the world, number of facilities providing testing and counselling continued to increase. HIV testing and counselling services were provided by more than 174 000 health facilities compared to 143 000 health facilities in 2011 (129 countries).⁶ But still around 30% of the infected people do not know that they have the virus as peoples were not utilizing these facility.²

National AIDS Control Programme (NACP) has consistently focused on prevention from HIV/AIDS through safe sex practices. Condom has significant role in the prevention of STI/HIV infections. Programme also focused on social marketing of condom and free distribution among the most vulnerable once for easy accessibility of condom to general population.⁴

Global decline in new HIV infections among children is reported but rate of decline is very slow which indicate that there is much more needs to improve knowledge of HIV and HIV testing among adolescents and young adults, as 59% of new infections are among young people aged 15-24 years.²

Communication is the key to generating awareness on prevention as well as motivating access to treatment, care and support. NACP-IV also gave emphasis on increase in knowledge among general population about safe sexual behaviour, to change the behaviour of at risk population.

To strengthen the enabling environment by facilitating appropriate changes in societal norms that reinforces positive attitudes, beliefs and practices to reduce stigma and discrimination.⁴ for this purpose there is need to improve the knowledge about HIV/AIDS among general population. So the present study was conducted to assess knowledge, attitude, and preventive practices regarding HIV infection and AIDS among rural peoples.

METHODS

The present study was a population based cross sectional study conducted in field practice area of RHTC of Chandulal Chandrakar Memorial Medical College, Durg, Chhattisgarh. RHTC covers 17 villages with population of 20325. Sample size calculated as 396 considering this population with expected probability of awareness as 50%, at confidence level 95%, acceptable error 5% and non-response rate 5%. We select 6 villages randomly and from each village 66 peoples were interviewed for the study. From each village individuals were selected by simple random sampling method. Study participant should be more than 15 years of age and resident of the

same village was used as inclusion criteria. Data collection was done for 3 months (i.e. from March 2015 to May 2015) by using predesigned and pretested questionnaire after taking written informed consent. Consent of participant age less than 18 years was taken from their parents. These questionnaires consist of demographic characteristics (age, sex, marital status, education and occupation), knowledge awareness regarding transmission of HIV/AIDS (faithful partner, condom use, mosquito bite, sharing food, pregnancy and breastfeeding), attitude towards HIV positive people (willing to care, willing to purchase vegetable) and awareness of availability of HIV testing facility. Information was entered in Microsoft Excel 2007 software and analysed using Epi-Info software version 7.222.

RESULTS

In present study total 396 individuals were participated. Age of these study population were in a range of 15 years to 70 years with mean age 31.5 ± 10.5 years. Majorities were in an age group 21 to 30 years and 31 to 40 years (i.e. each group having 30.3%) (Table 1). Study participants consist of 192 (48.5%) males and 204 (51.5%) female (Table 2).

Table 1: Age wise distribution of study participants.

| Age (in years) | Frequency | Percentage (%) |
|----------------|------------|----------------|
| ≤20 | 79 | 19.9 |
| 21–30 | 120 | 30.3 |
| 31–40 | 120 | 30.3 |
| 41–50 | 65 | 16.4 |
| >50 | 12 | 3.1 |
| Total | 396 | 100 |

Table 2: Sex wise distribution of study participants.

| Sex | Frequency | Percentage (%) |
|---------------|------------|----------------|
| Male | 192 | 48.5 |
| Female | 204 | 51.5 |
| Total | 396 | 100 |

As far as knowledge regarding transmission of HIV/AIDS is concerned, 71.5% knows that uninfected faithful partner prevents transmission of infection, 82.1% knows that use of condom during sexual intercourse prevents the transmission of HIV infection from one person to their partner. 53.3% study population were aware that mosquito bite does not transmit HIV infection, 62.4% aware about sharing food with infected person will not spread infection and 67.2% knows that even healthy looking person can got infected with HIV. One of the important modes of HIV transmission is mother to child transmission. 83.1% knows that HIV can transmit during pregnancy and delivery to the child, 79.3% knows about HIV transmission through breastfeeding to their children (Table 3).

Table 3: Knowledge about transmission of HIV/AIDS.

| Different attitudes | Response | Frequency (N=396) | % |
|---|----------|-------------------|------|
| Uninfected faithful partner prevents HIV/AIDS | Yes | 283 | 71.5 |
| | No | 113 | 28.5 |
| Condom use prevents HIV/AIDS | Yes | 325 | 82.1 |
| | No | 71 | 17.9 |
| Mosquito does not transmit HIV/AIDS | Yes | 211 | 53.3 |
| | No | 185 | 46.7 |
| Sharing food with infected person Will not transmit HIV/AIDS | Yes | 247 | 62.4 |
| | No | 149 | 37.6 |
| Health looking person can have HIV/AIDS | Yes | 266 | 67.2 |
| | No | 130 | 32.8 |
| Pregnancy and delivery can transmit HIV/AIDS | Yes | 329 | 83.1 |
| | No | 67 | 16.9 |
| Breastfeeding can transmit HIV/AIDS | Yes | 314 | 79.3 |
| | No | 82 | 20.7 |

Table 4: Attitude of study participants towards HIV/AIDS.

| Different attitudes | Response | Frequency (N=396) | % |
|---|----------|-------------------|------|
| HIV/AIDS status should not be kept secret | Yes | 242 | 61.1 |
| | No | 154 | 38.9 |
| Willing to care relative having HIV/AIDS | Yes | 323 | 81.6 |
| | No | 73 | 18.4 |
| Will allow teachers having HIV/AIDS to keep teaching | Yes | 351 | 88.6 |
| | No | 45 | 11.4 |
| Willing to buy vegetable from shopkeeper having HIV/AIDS | No | 125 | 31.6 |

People's positive attitude towards HIV positive people can reduce the fear about disease. HIV status will not be kept secret by 61.1% respondent, 81.6% were ready to take care of relatives or family members if they infected with HIV, 88.6% were allow teachers having HIV infection to continue their teaching, 68.4% were ready to purchase vegetables from shopkeeper having HIV infection (Table 4).

Table 5: Awareness of nearby available facilities.

| Available facilities | Awareness | Frequency (N=396) | % |
|-------------------------------------|-----------|-------------------|------|
| Place of condom availability | Yes | 146 | 36.8 |
| | No | 250 | 63.2 |
| Place of HIV testing | Yes | 197 | 49.7 |
| | No | 199 | 50.3 |

Among the study population, only 36.8% were aware about the nearby places where condoms are available and 49.7% were aware about the place where blood testing for HIV infection facility available (Table 5).

DISCUSSION

The present study is conducted to find out the awareness about HIV/AIDS among rural peoples. In this study 48.5% were male and 51.5% were female. Nearly similar gender distribution is also seen among general population but with male majority in census 2011.⁷ The age of study participant range of 15 years to 70 years with mean age 31.5±10.5 years, similarly in study conducted by Hussain in Karachi also have participants of mean age 35.3±10.7 years.⁸ Knowledge regarding transmission of HIV in present study, 82.1% aware of condom prevents transmission, 62.4% aware about sharing food will not transmit infection. A study conducted by Lucksom on antenatal mothers found that 48% women were aware that condom prevents HIV transmission.⁹ Another study conducted by Pitts on social workers and found that 77% social workers were aware that condom prevents HIV transmission.¹⁰ Regarding the sharing food as a mode of transmission, in study conducted by Hussain in Karachi found that 94.2% were aware of sharing food will not transmit infection.⁸ In present study knowledge about mother to child transmission of HIV is adequate. 83.1% knows about pregnancy and delivery while 79.3% knows about breastfeeding transmit HIV to their children. A study conducted by Lucksom on antenatal mothers found that 68% were aware about mother-to-child transmission of HIV during antenatal period and only 2.66% knew about transmission child through breast milk.⁹ In another study conducted by Aziz among health care workers found that 71% were aware of vertical transmission of HIV.¹⁰ This knowledge is more among study participants as compare to other studies.

In present study 81.6% were ready to take care of relatives or family members if they infected with HIV, 68.4% were ready to purchase vegetables from shopkeeper having HIV infection. While study conducted by Pitts M found that 91% of social workers felt that AIDS victims should be treated the same as other sick people.¹¹ Study conducted by Sanou among student found that 40.9% had stigmatizing attitude toward HIV infected people such negative attitude is indicative of lack of knowledge about HIV.¹² Another cross sectional study conducted by Dhanya among dentist found that 89.5%

were not willing to treat HIV positive patient due to fear of spread of infection from contact with oral lesion.¹³

Awareness regarding the nearby government health facilities for accessing services related to HIV prevention and testing, in present study 36.8% were aware about places where condoms are available and 49.7% were aware about testing facility for HIV. In study conducted by He N among rural migrant and found that 80% aware about diagnosis of HIV infection by blood test, voluntary testing and counselling was known to 46.5%.¹⁴ Awareness of such facilities is important for personal prevention and for personal screening. This awareness helps to know the HIV status, which ultimately prevents such infection to spread in the community and change the behaviour of person towards HIV infection as well as HIV infected person.

CONCLUSION

This study indicates that people have good knowledge about HIV transmission i.e. faithful partner, condom use, pregnancy and breast feeding. Still some misconceptions are present among peoples regarding mosquito bite and sharing food with person having HIV/AIDS as people thinks that these can also transmit HIV infection. This shows gap in knowledge and attitude of peoples towards HIV/AIDS. Also participants have poor knowledge about nearby availability of services related to HIV/AIDS.

Recommendations

Emphasis should be given to remove some misconceptions among peoples regarding mosquito bite and sharing food with person having HIV/AIDS. Proper knowledge regarding nearby available facilities should be given through IEC activities to village peoples so that they can utilize to these facilities for their prevention and screening of HIV/AIDS.

ACKNOWLEDGEMENTS

To the study subject and social workers of the institute working in this area for their full co-operation and help.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. WHO. Global health observatory (GHO) data: HIV / AIDS. Available at <http://www.who.int/gho/hiv/en/>. Accessed on 21 October 2017.
2. UNAIDS. Fact sheet – Latest statistics on the status of the AIDS epidemic 2017. Available at: <http://www.unaids.org/en/resources/fact-sheet>. Accessed on 21 October 2017.
3. UNAIDS. AIDS info 2016. Available at <http://aidsinfo.unaids.org/>. Accessed on 23 August 2017.
4. NACO. Annual report 2016-17. Chapter 24: 338-407.
5. NACO. Department of AIDS control, Ministry of Health and Family welfare, Government of India, State fact sheets 2013-14: 16-17.
6. WHO. Global health observatory (GHO) data: Facilities with HIV testing and counselling, Situation and trends. Available at: http://www.who.int/gho/hiv/epidemic_response/testing/en/. Accessed on 21 October 2017.
7. GOI. Census of India 2011. Provisional population totals– India– Data sheet. Available at <http://pib.nic.in/prs/2011/latest31mar.pdf>. Accessed on 29 October 2017.
8. Hussain MFA, Khanani MR, Siddiqui SE, Manzar N, Raza S, Qamar S. Knowledge, attitudes and practices (KAP) of general practitioners (GPs) regarding sexually transmitted diseases (STDs) and HIV/AIDS in Karachi, Pakistan. J Pak Med Assoc. 2011;61(2):202-5.
9. Lucksom PG, Upadhyay R, Kharka L, Dubey S, Choudhary N, Yadav R. KAP Study on HIV/AIDS Among Antenatal Women Attending Central Referral Hospital of North East India. J Obstet Gynaecol India. 2016;66(1):55-9.
10. Aziz S, Memon A, Tily HI, Rasheed K, Jehangir K, Quraishy MS. Prevalence of HIV, hepatitis B and C amongst health workers of Civil Hospital Karachi. J Pak Med Assoc. 2002;52(3):92-4.
11. Pitts M, Jackson H, Wilson P. Attitudes, knowledge, experience and behaviour related to HIV and AIDS among Zimbabwean social workers. AIDS Care. 1990;2(1):53-61.
12. Sanou SM, Fokam JM, Mabvouna BR, Guetiya WR, Sali BB, Teikeu TV, et al. Knowledge, attitudes and practices on HIV / AIDS in the south region of Cameroon: case of the town of Kribi. Ig Sanita Pubbl. 2014;70(4):381-92.
13. Dhanya RS, Hegde V, Anila S, Sam G, Khajuria RR, Singh R. Knowledge, Attitude, and Practice towards HIV Patients among Dentists. J Int Soc Prev Community Dent. 2017;7(2):148-53.
14. He N, Zhang J, Yao J, Tian X, Zhao G, Jiang Q, Detels R. Knowledge, attitudes, and practices of voluntary HIV counseling and testing among rural migrants in Shanghai, China. AIDS Educ Prev. 2009;21(6):570-81.

Cite this article as: Kawale SK, Sharma V, Thaware PP, Mohankar AD. A study to assess awareness about HIV/AIDS among rural population of central India. Int J Community Med Public Health 2018;5:373-6.