

# A Cross Sectional Study to Evaluate Knowledge and Attitude towards HIV Infection in Rural Population.

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Received: June 2019

Accepted: June 2019

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## ABSTRACT

**Background:** Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) is a major and one of the most serious public health challenges in today's world. The present study was conducted to assess knowledge and attitude regarding HIV in rural population. **Methods:** The present cross sectional study was conducted by involving 960 rural population of both genders. Study participant should be more than 15 years of age and resident of the same village was used as inclusion criteria. General information such as name, age, gender etc. was recorded. A questionnaire was prepared which were related to knowledge and attitude of rural population regarding HIV. Respondents were instructed to respond in yes or no. **Results:** Out of 960 subjects 620 were aware of HIV/AIDS, 680 were aware of VCCT, 650 were aware of VCCT centre, 830 had heard of condom and 760 were aware of ARV. The difference was significant ( $P < 0.05$ ). **Conclusion:** Authors found that respondents had sufficient knowledge and attitude regarding HIV infection.

**Keywords:** Attitude, HIV, Knowledge, Prevention, Control.

## INTRODUCTION

Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) is a major and one of the most serious public health challenges in today's world. HIV has rapidly established itself throughout the world over the past three decades. Youth cohort is one of the most vulnerable groups as far as risk of HIV/AIDS is concerned. The first case of Acquired Immune Deficiency Syndrome (AIDS) in Nigeria was reported in 1986. Since then, infection with Human Immuno-deficiency Virus (HIV) has spread to become a generalized epidemic affecting all population groups and sparing no geographical area in the country. An estimated 35.3 million people across the world are infected with HIV. According to the joint United Nations programme on HIV/AIDS (UNAIDS), HIV is one of the leading causes of mortality across the globe. A major proportion of HIV infected individuals reside in the developing world, of which the populous countries of the Asian subcontinent are of major concern.<sup>[1-4]</sup>

The contribution of India to the global burden of HIV/AIDS is significant with nearly 2.39 million people currently affected with the disease in the country. Though the HIV prevalence in India is low, the large population base of the country explains this enormous absolute number of HIV infected. The large population base also makes the country more vulnerable to HIV. Furthermore, the epidemic is moving from high-risk groups such as sex workers to the general population and from urban to rural populations. Of the estimated people living with HIV, 60% reside in rural areas.<sup>[2]</sup>

Sub-Saharan Africa is the region most affected. In 2017, an estimated 66% of new HIV infections occurred in this region.<sup>[3]</sup> Studies from other African countries and eastern India also revealed that comprehensive knowledge of HIV/AIDS ranged from 9% to 42%; however, studies from Brazil and Europe showed a higher (more than 90%) degree of HIV/AIDS and related issues awareness.<sup>[4]</sup> For prevention, knowledge about AIDS is mandatory. The present study was conducted to assess knowledge and attitude regarding HIV in rural population.

## MATERIALS AND METHODS

The present cross sectional study was conducted in the department of community medicine by involving 960 rural population of both genders. Ethical

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clearance was obtained prior to the study. All were informed regarding the study and written consent was obtained. Study participant should be more than 15 years of age and resident of the same village was used as inclusion criteria. General information such as name, age, gender etc. was recorded. A questionnaire was prepared which were related to knowledge and attitude of rural population regarding HIV. Respondents were instructed to respond in yes or no. Results were tabulated and subjected to statistical analysis. P value less than 0.05 was considered significant.

## RESULTS

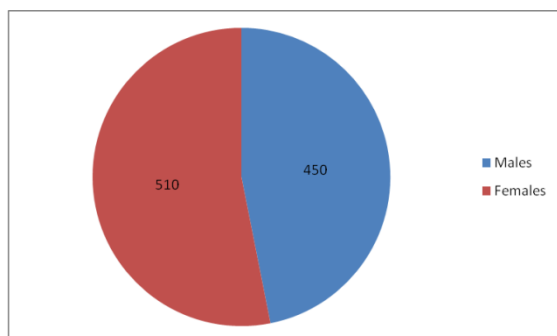


Figure 1: Distribution of subjects

Bar [Figure 1] shows that out of 960 subjects, males were 450 and females were 510.

Table 1: Knowledge about HIV

Knowledge	Yes	No	P value
Are you aware of HIV/AIDS?	620	340	0.05
Are you aware of VCCT?	680	280	0.01
Do you know any VCCT center?	650	310	0.01
Have you heard of condom before?	830	130	0.02
Are you aware of ARV?	760	200	0.01

[Table 1] shows that 620 subjects were aware of HIV/AIDS, 680 were aware of VCCT, 650 were aware of VCCT centre, 830 had heard of condom and 760 were aware of ARV. The difference was significant ( $P < 0.05$ ).

Table 2: Attitude about HIV

Knowledge	Yes	No	P value
Can one go for VCCT?	640	320	0.01
Is there any advantage of knowing ones status?	740	220	0.04
Do you think HIV is real?	680	280	0.02
Do you think HIV is curable?	870	90	0.01
Do you think condom use can prevent HIV transmission?	740	220	0.01
Do you belief disinfecting clippers, needles and sharp instrument can prevent HIV transmission?	880	80	0.011

[Table 2] shows that 640 were ready to go for VCCT, 680 were aware of that HIV is real, 870 were knowing that HIV is curable, 740 knew that condom can prevent HIV infection and 880 had belief that disinfecting clippers, needles and sharp instrument can prevent HIV transmission. The difference was significant ( $P < 0.05$ ).

## DISCUSSION

Knowledge, attitudes and practices (KAP) studies are very useful tools prior to any intervention to assess the extent to which individuals or communities are ready to adopt risk-free behaviors. The stages of HIV infection are primary infection, latency and AIDS. Acute infection lasts for several weeks and may include several symptoms and mouth and esophageal sores. The latency stage involves few or no symptoms and can last anywhere from two weeks to twenty years or more, depending on the individual. AIDS, the final stage of HIV infection, is defined by low CD4+ T cell counts, cancers and other conditions.<sup>[5]</sup>

HIV affects the immune system and reduces the body's defenses to protect against various infectious diseases and cancer. Treatment is available to delay the death of persons suffering from the disease; however, there is no cure. Thus it becomes necessary to educate young people so that they can protect themselves from getting infected. Various government and non-government organizations the world over have undertaken programs to raise awareness among people regarding HIV/AIDS.<sup>[6]</sup> The present study was conducted to assess knowledge and attitude regarding HIV in rural population.

In present study, out of 960 subjects, males were 450 and females were 510. 620 subjects were aware of HIV/AIDS, 680 were aware of VCCT, 650 were aware of VCCT centre, 830 had heard of condom and 760 were aware of ARV. The difference was significant ( $P < 0.05$ ).

Chatterjee et al,<sup>[7]</sup> found that Out of a total of 1,237 subjects who participated in survey, 60% knew something about HIV. Of those who had heard of HIV, more than 90% subjects knew the modes of transmission and more than 80% were aware of modes of prevention of HIV/AIDS. One fifth of the subjects had misconceptions in relation to HIV/AIDS. On applying multiple logistic regression, age, education, occupation, and mass media exposure were found to be the major determinants of their knowledge with regard to HIV/AIDS.

We found that 640 were ready to go for VCCT, 680 were aware of that HIV is real, 870 were knowing that HIV is curable, 740 knew that condom can prevent HIV infection and 880 had belief that disinfecting clippers, needles and sharp instrument

can prevent HIV transmission. The difference was significant ( $P < 0.05$ ).

Sodhi et al,<sup>[8]</sup> found that all respondents were aware of HIV/AIDS. Sources of information varied, the most common being sex education in school. The majority of participants demonstrated an adequate understanding of HIV transmission and prevention. However, misconceptions about routes of transmission were observed in 3.4 to 23.3 % of respondents. Risky behaviors were found among participants as about 60 % practice safe sex and 40 % reported not to. Up to 196 (42.2 %) respondents had a history of sexual intercourse of which 108 (56.25 %) had used a condom during their last three sexual encounters. About half of the respondents had negative views about HIV infected people. Students with medium (34.3 %) and high (62.1 %) levels of knowledge were more likely to display positive attitudes.

Lal et al,<sup>[9]</sup> observed that out of a total of 399 subjects who participated in survey, 57.9% and 36.8% are aware of VCT and ART as HIV/AIDS control measures. More than one quarter of the respondents i.e. 35.1% subjects believed HIV/AIDS is curable while only 15.5% had gone for VCT. Demographic characteristic such as educational status was found to have significant association with knowledge and attitudes towards control measures of HIV infection.

A study by Kawale SK et al,<sup>[10]</sup> revealed that 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.

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%.<sup>[14]</sup> 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.<sup>[11]</sup>

## CONCLUSION

Authors found that respondents had sufficient knowledge and attitude regarding 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. While media has played a crucial role in attaining the present level of knowledge about HIV/AIDS in the community, much efforts are still needed in this direction including education in conjunction with evolution of novel creative strategies to reach out to more and more people, make them aware about HIV/AIDS, improve their existing knowledge about this disease, and demystify their myths and misconceptions.

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**How to cite this article:** Chauhan AK, Narang S, Gupta P, Ranjan R. A Cross Sectional Study to Evaluate Knowledge and Attitude towards HIV Infection in Rural Population. *Ann. Int. Med. Den. Res.* 2019; 5(5):CM01-CM03.

**Source of Support:** Nil, **Conflict of Interest:** None declared