

Original Research Article

A study on knowledge attitude and practices regarding HIV/AIDS among general population in a community of Kottarakkara, Kerala

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ABSTRACT

Background: HIV/AIDS epidemic has emerged as one of the most serious and enormous health problems associated with high morbidity and mortality rate. A prospective questionnaire based observational study was carried out in Kottathala community of Mylom Gramapanchayat, Kottarakkara to analyse the peoples knowledge on HIV/AIDS, as well as attitudes towards HIV patients and actual sex practices for the control or prevention of HIV.

Methods: A total of 150 participants were interviewed by using a predesigned questionnaire and responses were reviewed and analysed by using descriptive statistics namely total numbers and percentage.

Results: Out of 150 participants females were more (84%) and most of them were under the age group of 18-30 years. Majority of the participants had higher degree of education (51.33%) as they are still youth. The overall participants had a higher degree of knowledge regarding HIV and most of them had a positive attitude towards the HIV patients. Around 84% of participants had history of sexual intercourse but majority of them (46%) never used condoms during sexual intercourse in which, 11.33% only using condom regularly. Most of them were following unsafe sexual practices.

Conclusions: This study concludes that the surveyed general populations had high knowledge and attitudes regarding HIV/AIDS and had risky sexual practices.

Keywords: Attitude, Descriptive statistics, HIV/AIDS, Knowledge, Practices, Questionnaire

INTRODUCTION

HIV/AIDS epidemic has emerged as one of the most serious and enormous health problems within about two decades in India. HIV, the disease, whose mode of transmission is known and is largely preventable, but due to lack of knowledge and practices about HIV/AIDS in general population makes it rapid spread in our country.¹ The World Health Organization (WHO) reported approximately 33.3 million people were infected with HIV/AIDS globally in the year 2015. More than seven thousands new HIV/AIDS infections occur every day while approximately 4000 people die every day globally with HIV/AIDS. Of those who are infected, nearly 95% were unaware of their HIV/AIDS status.²

The youths and adults are much more prone to HIV infection as well as other sexually transmitted infections as a result of a lack of correct health information, engagement in risky behaviours, and a lack of access to adequate reproductive health services. Every day 5000 young people in the world become infected with HIV, which translates into almost 2 million new infections per year.³

HIV is the abbreviated form for human immunodeficiency virus, which is a retrovirus that can lead to acquired immunodeficiency syndrome (AIDS). As the name implies it is a condition resulted by a deficiency in the body's immune system and can spread through different routes.⁴ India has a population of 1.2 billion

people, half of whom are adults in the sexually active age group. Demographically, the second largest country in the world, India has also the third largest number of people living with HIV/AIDS. Government of India estimates that about 2.40 million Indians are living with HIV (1.93-3.04 million) with an adult prevalence of 0.31% (2009).⁵

An AIDS patient being thrown out of the village is an everyday story in the Indian newspapers. That is the magnitude of stigma attached to this disease. Even today AIDS vaccines are not a reality and ARVs are restricted only for an advanced stage and after a thorough patient counselling.⁶ Increasing knowledge of HIV/AIDS can be a powerful means of fostering positive attitudes and building safe practices among populations. Hence, a clear understanding about knowledge, attitudes and practices (KAPs) among any population is very important for planning to control or prevent the spread of HIV.⁷

Now a days, HIV has become the most serious and enormous health problem associated with highest morbidity and mortality rate. Several studies on KAP regarding HIV/AIDS have been reported from different parts of India. The studies done till date in Kerala to assess the knowledge attitude and practices among populations are rare and unfortunately there are no studies done in Kottarakkara Town regarding HIV/AIDS. Before formulating any public programmes or policies for the prevention of HIV, it is necessary to gain information about the knowledge, attitude and practice (KAP) regarding HIV/AIDS, in the target community.

So, we therefore proposed this study in our community to analyse the people’s knowledge on HIV/AIDS, as well as attitudes towards HIV patients and actual sex practices, which can provide appropriate education regarding the misconceptions about HIV/AIDS.

METHODS

Research design

The study was carried out for a period of three months from June 2020 to August 2020 in the Kottathala community of Mylom Gramapanchayat, Kottarakkara, Kerala. A prospective questionnaire based observational study was carried out by randomly allocated samples through interviewing 150 participants who were willing to participate in the study.

Sample size

Sample size was calculated based on the population size.

$$n = \frac{Z^2 \times p \times q + ME^2}{ME^2 + Z^2 \times p \times q \div N}$$

n= finite populations

Z= Confidence interval

N= Size

P, q = Maximum population variability

E= Sampling error

Inclusion criteria

Participants of either sex aged between 18- 78. People who were willing to participate in the study.

Exclusion criteria

Population with age <18. People who were not willing to participate in the study.

A pre-designed questionnaire was used as a study tool to enter the responses of participants along with the participants’ details. The patient consent was taken with their signature. Data was analysed using the descriptive statistics namely total numbers and percentage.

Statistical analysis

The demographic data and disease data of the patients were analyzed. Microsoft word and Excel have been used to generate graphs, tables etc.

RESULTS

A total number of 150 participants were interviewed using the pre designed questionnaire and their responses were reviewed and analyzed.

Table 1: Gender distribution (n=150).

Sex	Frequency	Percentage
Male	66	44
Female	84	56

Table 1 shows the distribution of participants with respect to their Gender. In which out of 150 patients 66 (44%) and 84 (56%) were females.

Table 2: Distribution based on age (n=150).

Age (in years)	Frequency	Percentage
18-30	65	43.33
30-42	24	16
42-54	32	21.33
54-66	23	15.33
66-78	6	4

Table 2 illustrates that maximum number of people were found in the age group of 18-30 years (43.33%), followed by age group between 42-54 years (21.33%). That is the youths are most vulnerable to infection.

Table 3 explains that most of the patients have higher educational status (51.33%) which is a major contributing factor to the knowledge attitude and practices about HIV.

Table 3: Distribution based on educational status (n=150).

Education	Frequency	Percentage
Primary	36	24
Secondary	37	24.66
Higher degree	77	51.33

Table 4 suggests Most of the participants were unemployed 70 (46.66%) followed with employed 61 (40.66%) and students 19 (12.66%).

Table 4: Distribution based on employment status (n=150).

Employment status	Frequency	Percentage
Student	19	12.66
employed	61	40.66
Unemployed	70	46.66

Table 5 illustrates the marital status of the participants. As depicted, there was a higher percentage of married participants 116 (77.33%) followed by unmarried participants 32 (21.33%).

Table 5: Distribution based on marital status (n=150).

Marital status	Frequency	Percentage
Married	116	77.30
un married	32	21.33
Divorced	2	1.33

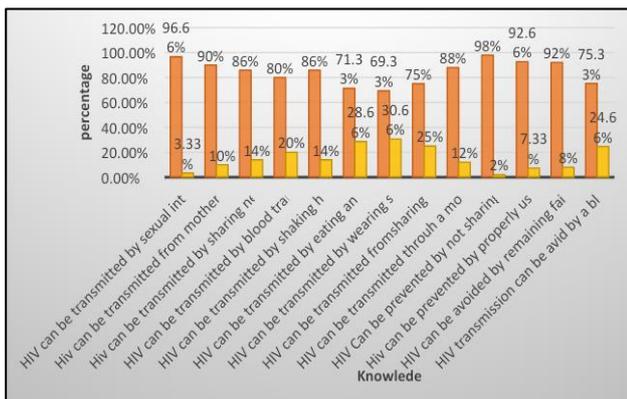


Figure 1: Knowledge of patients regarding HIV.

Figure 1 explains about the knowledge of patients regarding the HIV. A relatively high knowledge of the participants regarding HIV was determined from this data. Most of the participants had high knowledge as well as high educational status. Overall, the knowledge about route of transmission of HIV was high for some factors and relatively low for other factors.

Overall attitudes of the participants are illustrated in Figure 2. Most of the participants exhibited a positive attitude towards the HIV patients. Very less participants were showed a negative impact on HIV positive patients. Out of 150 participants, 90% were willing to continue their relationships with the HIV positive patients. This is a good response of the population to avoid social discrimination towards the HIV patients.

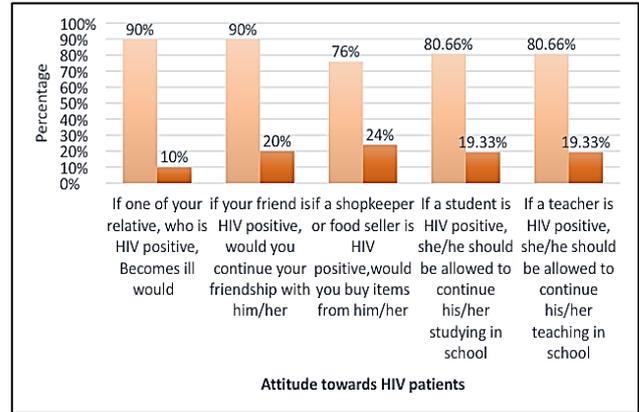


Figure 2: Attitudes towards HIV patients.

Figure 3 illustrates the practices regarding sex. According to this study, One-third of general population 128 (84%) had a history of sexual intercourse, only 50 (34%) of the participants used condom during the intercourse. In which Only 17 (11.33%) of people using condoms regularly during sexual intercourse. This is a sign of unsafe sex.

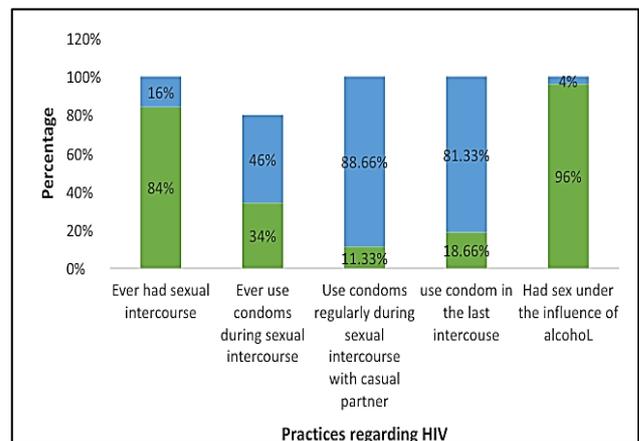


Figure 3: Practices regarding HIV/AIDS.

DISCUSSION

A questionnaire based observational analysis was carried out by interviewing 150 participants who were willing to participate in the study from the Kottathala community of Mylom Gramapanchayat.

The HIV/AIDS is acquired due to high risk behaviour of people which helps the virus to enter the body. The major issues related to HIV/AIDS is social stigma and

discrimination which exist at individual, family and societal level. Stigma and discrimination fuel the HIV/AIDS epidemic. The reasons behind these issue are wide spread ignorance, poor information and misconceptions about HIV/AIDS. Understanding about the knowledge, attitude and practices about HIV/AIDS of people having HIV/AIDS in general populations will help in formulating strategy for prevention.

Table 1 shows the distribution of participants with respect to their Gender. In which out of 150 patients 66 (44%) and 84 (56%) were females. This data suggests that the female populations are more seen in the community or the Females are more willing to become the part of the study.

Table 2 represents the distribution based on age. The participants aged from 18-78 were included in the study. Among the total data collected, age was taken into consideration by dividing into 5 age groups being kept an interval of 12 years each. Maximum number of people were found in the age group of 18-30 years (43.33%), followed by age group between 42-54 years (21.33%) and 30- 42 years of age (16%), age group between 54-66 years were 15.33%. The least were found in age group between 66-78 years (4%). This data suggests that youths are most vulnerable to infection because they engage in risky practices due to a lack of adequate information. Thus, evaluating their KAPs will help in designing appropriate prevention strategies. The same result are also reported in Nubed et al.³

Table 3 presents the education status of the participants. There were no illiterate participants in the study. A total of 77 (51.33%) participants had higher degree followed with secondary education 37 (24.66%) and primary education (24%). This data illustrates that most of the patients have higher educational status which is a major contributing factor to the knowledge attitude and practices about HIV. Awareness is the most reliable factor to avoid the spreading of HIV infection.

Occupation of the participants was described in the Table 4. The comparison were done between 3 groups as students, employed and unemployed. The unemployed participants were more this may be due to the large female population than males in the community, i.e. most of the female participants were house wives.

Table 5 illustrates marital status of the patients. The patients were categorized as married, unmarried and divorced. As depicted, there was a higher percentage of married participants 116 (77.33%) followed by unmarried participants 32 (21.33%). and very least were divorced patients 2 (1.33%). This data suggests that, To the extent that marital behaviour is influenced indirectly by the HIV epidemic, individual choices are likely to be sensitive to the local risk environment. Statistical associations between marriage and HIV may be less likely to provoke behaviour changes than perceptions among young adults of marriage as a risky or protective space.

Figure 1 explains about the knowledge of patients regarding the HIV. Overall, the knowledge about route of transmission of HIV was high for some factors and relatively low for other factors. Accordingly, out of 150 patients 145 (96.66%) of respondents knew that HIV can be transmitted through sexual intercourse. The majority of population were also aware that HIV can be transmitted from mother to child, through sharing needles or syringes and through blood transfusions 135 (90%), 129 (86%) and 120 (80%) respectively. A total of 129 (86%) of participants correctly answered that “shaking hands” with HIV does not spread HIV. There was confusion about routes of transmission, but most of respondents correctly thought that HIV can’t be transmitted by eating from the same plate, drinking from the same glass 107 (71.33%), wearing the same clothes 104 (69.33%) and sharing the same toilet 113 (75%) with HIV. Only 03 (2%) of the respondents incorrectly correctly answered that mosquitos transmit HIV.

The knowledge about prevention and control also summarizes the knowledge of the general about prevention of HIV. A satisfactorily high level of knowledge was reported by the population when they were asked questions such as: can HIV be prevented by not sharing needle or syringe 139 (92.66%), can using condoms during sexual intercourse protect against HIV infection 138 (92%) and can HIV be controlled by sticking to a single partner 113 (75.33%). Very less participants 15 (10%) only said like HIV can’t be prevented by blood test before marriage.

So, according to this data, it is clearly shows that the participants who involved in the study have high knowledge regarding the HIV/AIDS. Very less people have improper knowledge about the disease. So, this awareness can help them to avoid spreading of the disease.

Overall attitudes of the participants are illustrated in Figure 2. The population exhibited positive attitudes to taking care of their HIV-positive relatives if they were ill [135 (90%)] and continuing friendships with HIV-positive friends [135 (90%)]. However, a very less participants showed negative attitudes on issues such as: buying items from a HIV-positive shopkeeper or food seller [36 (24%)] if an HIV-positive student should be allowed to continue her/his studying in school 29 (19.33%) and if an HIV-positive teacher should be allowed to continue her/his teaching in school 29 (19.33%). These attitudes are important to consider when developing strategies to respond to HIV. This data says that most of the participants in the population have a positive attitude towards the HIV infected persons. So this is a good response of the population to avoid social discrimination towards the HIV patients. The same results also reported in Tanavahn et al.⁷

Figure 8 illustrates the practices regarding sex. General population need targeted counselling about safe practices

by avoiding, for example, unprotected sexual relationships and exchange of syringes/needles. Risky sexual practices were also highlighted as another barrier for HIV prevention. One-third of general population 128 (84%) had a history of sexual intercourse, similar to the findings from Tanavahn et al⁷. Although condoms are widely available in pharmacies, and are cheap to buy, affordability might still be a factor behind its inconsistent use by people. Most of the participants never used condoms during sexual intercourse that is only 50 (34%) of the participants used condom during the intercourse. In which only 17 (11.33%) of people using condoms regularly during sexual intercourse this may be due to the myths and belief associated with the condom use or may be due to the inappropriate knowledge about the use of condoms. Very less participants 6 (4%) had sex under the influence of alcohol. From this data, the population in the community have unsafe sexual practices which can lead to the spreading of disease. So an awareness classes, or providing knowledge about safe sex and condom use may help them to achieve safe sex practices.

Limitations of the study were lack of previous research studies on the topic, conflicts arising from cultural bias and other personal issues, false belief and myths about the disease and issues to reveal their personal life (sexual life).

CONCLUSION

The study concluded that, the surveyed general populations had high knowledge and attitudes regarding HIV/AIDS and had risky sexual practices. Although the population had some misconceptions about HIV transmission and social discrimination, the population had a higher educational status which may be the contributing factor for the higher knowledge and attitudes. HIV/AIDS-related education programmes should include specific interventions to change practices, along with knowledge and attitudes.

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