



## Assessment of Knowledge About HIV/AIDS Among Public – A Rural Perspective of South India

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### ABSTRACT

The objective of this study was to assess knowledge, on HIV/AIDS among rural residents of south India where HIV/AIDS pandemic is high. A HIV-KQ-18 Questionnaire were distributed or directly interviewed to the population of rural people in the part of south India and the Respondents were asked to provide answers to a reliable and validated HIV-KQ 18 questionnaire, about knowledge and attitudes about HIV/AIDS. Study results indicated that the majority of people had a minimum level of HIV / AIDS knowledge, and acceptance, attitudes towards people with HIV and AIDS. Males had more acceptance and positive attitudes towards answering the questionnaire about AIDS than females overall, the knowledge about HIV/AIDS was uneven. A peer educational program to talk about self-esteem, healthy sexual attitudes, being human-accepting and loving should be developed in the near future. It is clear that learning for life is gaining momentum. However, it is important to acquire knowledge and educate the public about HIV/AIDS preferably in rural part of India to lead healthy and better quality of life.

### INTRODUCTION

The Human Immunodeficiency virus (HIV)/Acquired Immunodeficiency syndrome (AIDS) epidemic has devastated many individuals, families and communities.

AIDS continues to be a major global health priority. Although important progress has been achieved in preventing new HIV infections and in lowering the annual number of AIDS related deaths, the number of people living with HIV continues to increase. AIDS-related illnesses remain one of the leading causes of death globally and are projected to continue as a significant global cause of premature mortality in the coming decades [1]

The number of people living with HIV worldwide continued to grow in 2008, reaching an estimated 33.4 million [31.1 million–35.8 million]. The total number of people living with the virus in 2008 was more than 20% higher than the number in 2000, and the prevalence was roughly threefold higher than in 1990. 2 Asia, home to 60% of the world's population, is second only to sub-Saharan Africa in terms of the number of people living with HIV. India accounts for roughly half of Asia's HIV prevalence. [2]

As the epidemic evolves further, rates will continue to rise in communities and nations where poverty, social inequalities, and weak health infrastructures facilitate spread of the virus. The estimate of 5.7 million HIV infected people in India, as compared with 5.5 million in South Africa, has captured wide attention. [3]

National AIDS Control Organization (NACO) and Ministry of Health and Family Welfare, Government of India in 2005 declared six states (Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland, and TamilNadu) as high prevalence areas (defined by a rate of HIV positivity of more than one percent among women visiting pre-natal clinics and a rate of more than five percent among patients visiting clinics for STDs).

Andhra Pradesh is considered one of India's high prevalence HIV/AIDS states and has responded to the disease with a wide ranging programme consisting of information and education, targeted interventions, testing for HIV infection, treatment and many others. Out of 5.1 million estimated cases of HIV/AIDS in India about 10 percent are in Andhra Pradesh. [4]

Knowledge is a key component of HIV risk reduction programs, interventionists often use knowledge assessments to guide educational curriculum and to provide feedback to enhance risk awareness Individuals those are residing at rural part of India might be hit hard by the HIV pandemic due to lack of adequate information regarding HIV knowledge and behavior, this study deals with assessment of knowledge regarding HIV/AIDS in rural residents in part of south India.

### MATERIALS AND METHODS

#### Sampling

Randomized sampling was carried out to select 259 rural

people residing at near to Anantapur, a part of south India, where the epidemiological survey shows the HIV patients and risk of HIV infection is high. Study population were informed about the general objectives of the research and their oral consent were taken

### Questionnaire

The validated HIV Knowledge Questionnaire is a self-administered instrument that was developed using formative work, item and factor analyses to assess knowledge needed for HIV prevention. Respondents read 18 statements about HIV, and indicate whether they think the statement is true or false, or they indicate that they "don't know. Correct answers were coded as "1", false answer and do not know as "0" and the questionnaire were divided into three parts accessing to their dimensions like disease transmission, prevention and state of disease. [5]

### Methodology

259 subjects were participated in the survey, of whom 174 (67.18%) were male and 85 (32.81%) were female, this study was undertaken in between September 2010 to December 2010 by contacting individually at the rural part of south India where the HIV/AIDS pandemic is high. Altogether 259 subjects irrespective of their sex were interviewed using an interview schedule and data were analyzed.

**Table No.1:** Gender wise distribution of study population

S.No	Category	No. of patients (%)
1.	Male	174(67.18)
2.	Female	85(32.81)
3.	Total	259

**Table No.3:** Educational status of study population

S. No	Educational background	Male N (%)	Female N (%)	Total N (%)
1.	Illiterate	66 (37.9)	46 (54.11)	112 (43.24)
2.	Just literate	30 (17.24)	18 (21.17)	48 (18.53)
3.	School graduate	39 (22.41)	08 (9.41)	47 (18.14)
4.	College and university	39 (22.41)	13 (15.29)	52 (20.07)

**Table No. 2:** Age wise distribution of study

S. No	Age group	Males N (%)	Females N (%)	Total N (%)
1.	18–24	32 (18.39)	20 (23.52)	52 (20.07)
2.	25–34	74 (42.52)	34 (40)	108 (41.69)
3.	35–44	41 (23.56)	19 (22.35)	60 (23.16)
4.	45 +	27 (15.51)	12 (14.11)	39 (15.05)

## RESULTS AND DISCUSSION

259 rural south Indian residents participated in the survey, of whom 174 (67.18%) were male and 85(32.81%) were female. Most of the study population were within the age group of 25 – 34 years and study population contains more number of 112 (43.24%) of illiterates.

The overall mean HIV knowledge score was 8.84, with a range of 2– 16 scores there were no significant gender differences and also no difference between those who had sexual intercourse or not. Our study found that knowledge of HIV/AIDS was poor in some dimensions and more satisfactory in other dimensions but generally was not satisfactory.

Table 4 Summaries the frequency and percentage of knowledge regarding HIV/Aids transmission among study participants, Knowledge regarding transmission modes were fairly good 88.7% pointed out that HIV was sexually transmitted. Most were also aware that HIV will not be transmitted by Coughing and sneezing (n =208, 80.30%), and from mother-to-

child transmission but the subjects are having the misconception that All pregnant women infected with HIV will have babies born with HIV (n =58, 22.39%). However, only (n=76 29.34%) realized that HIV could be transmitted by having oral sex, (n =104, 40.15%) realized that HIV could be transmitted by anal sex with an infected person. Still, there were some misconceptions regarding non-transmittable routes(n=92,35.53%) of those polled believed that HIV could be transmitted through deep kissing, putting their tongue in their partner's mouth, if their partner has HIV, and(n=44, 16.99%) believed HIV could be transmitted by sharing public swimming pools or hot tubs with an infected person. In all, none of them were answered all HIV transmission questions correctly. Females are more believed that pulling out the penis before a man climaxes or cums (ejaculates) keeps a woman from getting HIV during sex. 85.32% of people know that sharing a glass of water with someone who has HIV will not transmit HIV virus.

Table 5 summaries the frequency and percentage of knowledge regarding disease prevention among study participants, Subjects' knowledge in the area of prevention was moderate. More than 80% of the students gave correct responses to the majority of questions. Expectedly (n = 244, 94.20%) were knows that sex with multiple partners can increase a chance of getting infected with HIV/AIDS, and only (n=2, 0.77%) subjects knew the about female condom and there is a wrong belief among subjects is that natural skin condom works better than latex

condom (n=121, 46.71%). Still around (n=182, 70.27% ) were believing that woman cannot get HIV if she has sex during her period and Showering, or n=177, 68.33% believing that washing one's genitals/private parts, after sex keeps a person from getting HIV. This has been illustrated in Table 6

In our study 18.14% people agreed to the statement that people who have been infected with HIV quickly shows serious signs of being infected, 14.67% are believed that taking a test for HIV one week after sex will tell the person if she or he has HIV.

**Table No.4:** Frequency and Percentages of responses of HIV/AIDS knowledge on transmission

Sl. No	Particulars	Male N (%)	Female N (%)	Total N (%)
1.	Coughing and sneezing do not spread HIV.	129(74.13)	79(92.94)	208(80.30)
2.	A person can get HIV by sharing a glass of water with someone who has HIV.	145(83.33)	76(89.41)	221(85.32)
3.	Pulling out the penis before a man climaxes/cums keeps a woman from getting HIV during sex.	82(47.12)	74(87.05)	156(60.23)
4.	A woman can get HIV if she has anal sex with a man.	81(46.55)	23(27.05)	104(40.15)
5.	All pregnant women infected with HIV will have babies born with AIDS.	31(17.81)	27(31.76)	58(22.39)
6.	People are likely to get HIV by deep kissing, putting their tongue in their partner's mouth, if their partner has HIV.	115(66.09)	52(61.17)	167(64.47)
7.	A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV.	151(86.78)	64(75.29)	215(83.01)
8.	A person can get HIV from oral sex.	36(20.68)	40(47.05)	76(29.34)

**Table No.6:** Frequency and percentages of responses of HIV/AIDS Knowledge on disease state of HIV/AIDS

S.No	Particulars	Male N (%)	Female N (%)	Total N (%)
1.	People who have been infected with HIV quickly show Serious signs of being infected.	35(20.11)	12(14.11)	47(18.14)
2.	Taking a test for HIV one week after having sex will tell a person if she or he has HIV.	32(18.39)	06(7.05)	38(14.67)

**Table No. 5:** Frequency and percentages of responses of HIV/AIDS Knowledge on preventive measures

S.No	Particulars	Male N (%)	Female N (%)	Total N (%)
1.	Showering, or washing one's genitals/private parts, after sex keeps a person from getting HIV	69(39.65)	13(15.29)	82(31.66)
2.	There is a vaccine that can stop adults from getting HIV.	143(82.18)	74(87.05)	217(83.78)
3.	A woman cannot get HIV if she has sex during her period.	41(23.56)	36(42.35)	77(29.72)
4.	There is a female condom that can help decrease a Woman's chance of getting HIV.	2(1.14)	0	2(0.77)
5.	A natural skin condom works better against HIV than does a latex condom.	54(31.03)	67(78.82)	121(46.71)
6.	A person will NOT get HIV if she or he is taking Antibiotics.	53(30.45))	65(76.47)	118(45.55)
7.	Having sex with more than one partner can increase a Person's chance of being infected with HIV.	145(83.33)	77(90.58)	244(94.20)
8.	Using Vaseline or baby oil with condoms lowers the Chance of getting HIV.	73(41.95)	64(75.29)	137(52.89)

## CONCLUSION

Knowledge about HIV/AIDS was uneven. A peer educational program to talk about self-esteem, healthy sexual attitudes, being human-accepting and loving should be developed in the near future. It is clear that learning for life is gaining momentum. However, as we live in an era of population explosion, it is important to acquire knowledge and educate the public about HIV/AIDS preferably in rural part of India to lead healthy and better quality of life.

## REFERENCES

1. World Health Organization. World health statistics 2008. Geneva, World Health Organization, 2008.
2. UNAIDS. Report on the global AIDS epidemic, 2007; 72.
3. Stein brook R. HIV in India — A Complex Epidemic. N Engl J Med 2007; 356:1089-93.
4. Population foundation of India. Facts,& figures response to HIV/AIDS in Andhra Pradesh. 2005;4.
5. Carey P.M, Schroder E.E.K, Development and psychometric Evaluation of the Brief HIV Knowledge Questionnaire, AIDS Educ Prev. 2002; 14(2):172-182.