AWARENESS OF HIV/AIDS AMONG RURAL UNMARRIED GIRLS: A COMMUNITY BASED CROSS-SECTIONAL STUDY

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ABSTRACT: INTRODUCTION: The existence of HIV/AIDS poses a serious challenge to human being and its impact on a country is tremendous. Globally, almost of a quarter of people living with human immunodeficiency virus (HIV) are under the age of 25 years. Among them basically young girls are more susceptible because of unawareness. **METHODOLOGY:** A community based cross-sectional study was done among rural girls of age group 18-25 years of age who were unmarried. Data collection was done by semi structured predesigned questionnaire. Data was entered in Microsoft excel and analysed for frequency and percentage. **RESULTS:** About 100% of girls have ever heard of HIV.43.33% said that some microorganism is responsible for HIV. Most common route according to them was syringes and needles (65%). Misconceptions about HIV/AIDS was also prevailing among them as various modes of transmission mentioned by them were mosquito bite (26.67%), sharing food (23.33%) and by touch (21.67%), and for prevention most of them said it can be prevented by using condom during intercourse (40%).

KEY WORDS: HIV, AIDS, Rural girls

INTRODUCTION: Acquired immunodeficiency syndrome (AIDS) pandemic is an infectious disease caused by human immunodeficiency virus (HIV) that has created a global catastrophe. Once HIV starts damaging the human immune system, it ultimately develops AIDS and ends in death¹.

Globally, almost of a quarter of people living with human immunodeficiency virus (HIV) is under the age of 25 years. In India, 35% of all reported AIDS cases are among the age group of 15-24 years, indicating the vulnerability of the younger population to the epidemic .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.²

Adolescence is the time when they get interested in sexual relationships. Immature reproductive tracts make them more susceptible to HIV/AIDS. Discussing sex has also been a taboo among them. With the influence of media and the breakdown of traditional family structures, and in the absence of organized institutions for imparting sex education, they tend to learn about sexual and reproductive health from unreliable sources resulting in perpetuation of myths regarding safe sex and reproductive health.³

Among the adolescents, girls are more vulnerable to STDs including HIV/AIDS, especially through heterosexual intercourse. This increased vulnerability is attributable to the fact beyond their control such as sexual violence and exploitation, early sexual initiation and inability to negotiate for safe sex. These further strengthened by strong discrimination, lack of education, lack of power, lack of access to contraception and reproductive health issues. So, it is nearly impossible for the adolescents to protect themselves from sexually transmitted diseases, HIV and unwanted pregnancies⁴. Thus there is an immense need to assess the awareness levels of young girls in rural

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areas, towards HIV /AIDS and also periodic evaluation of government's measures The Aim of present study is to assess the awareness of unmarried girls about HIV/AIDS.

MATERIALS AND METHODOLOGY: Present cross-sectional community based study was carried out in village Limbgaon, district Nanded which is one of the centre under Rural health training centre of Dr. Shankarrao Chavan Government Medical College. Limbgaon has population of around 4500. All unmarried girls aged 18 and above of were included in the study. There were 164 unmarried girls who were above 18 years of age and unmarried at the time of survey. Out of 164 girls, 22 girls were excluded due to their non co-operation (12) and absent at the time of survey (10). Thus, total 142 girls were interviewed. Verbal consent was obtained from them after explaining the purpose of study. A questionnaire was designed to cover various aspects of AIDS such as its etiology, mode of transmission, risk behaviour, control and prevention of diseases.

Anonymity was maintained in the questionnaire to ensure correct elicitation of the knowledge level during interview.

Data analysis: Data was analysed after entering the data in excel sheet and then analysis was done by using SPSS version 16 for any significant relationship among two factors using Chi-square test.

RESULTS: For the present study 142 unmarried girls were interviewed. Out of 142 girls, 108(76.12%) belonged to the age group 18-21 years and 34(23.88%) girls belonged to the age group 22-25 years. There were no unmarried girls above 25 years of age in the village. The mean age of these unmarried girls was 19 years.

Out of 142 unmarried girls, 12 (8.33%) were illiterate while 130 (91.54%) were literate. Among literates 28 (20%) were educated up to primary schooling, 83 (58.33%) while 12 (8.33%) up to higher secondary schooling and 7 (5%) were graduated.

Awareness for HIV/AIDS: Regarding awareness about HIV/AIDS almost all unmarried girls that is 142(100%) had ever heard about the HIV/AIDS. Television was the most common source of information i.e. 71 (50%) followed by class room teaching 30 (20.66%), posters, newspaper, magazines 22(15.49%), Radio 12(8.45%) and friends 7(4.92%). (table 1).

Source of knowledge	frequency	Percentage		
T.V.	71	50		
Radio	12	8.45		
Class room teaching	30	20.66		
Friends	7	4.92%		
Poster, news paper, magazines	22	15.49		
Total	142	100		
Table 1: Source of knowledge about HIV/AIDS in study subject				

Knowledge about the Symptoms of HIV/AIDS: When asked about the symptoms of HIV/AIDS 78(54.93%) of them said that fever is the symptom of HIV. They have also mentioned some other

symptoms of HIV like weakness which was said by 71(50%) of the girls, body ache by 60(42.25%), diarrhoea by 44(30.98%) and cough by 23 (16.19%) of the girls.

Knowledge about causative agent of HIV: When information was obtained for the agent of HIV/AIDS 62(43.33%) said that some microorganism like virus is responsible, 19(13.33%) mentioned water as an agent for HIV/AIDS, 8(5.33%) said food, 6 (3.67%) said mosquito while 47(34.33%) did not have any idea about the agent of HIV/AIDS. (table 2)

Causative agent	frequency	Percentage		
Virus	62	43.33		
Water	19	13.33		
Food	8	5.33		
Mosquito	6	3.67		
Don't know	47	34.33		
Total	142	100		
Table 2: knowledge about causative agent of HIV/AIDS				

Knowledge about modes transmission of infection: When asked whether they know how HIV gets transmitted 70% of the girls said yes. However among them when further details about various modes of transmission of HIV was asked, 92 (65%) knew about transmission through the sharing of needles/syringes, 71(50%) knew that the disease was transmitted through sexual intercourse, about66 (46.67%) knew about transmission of HIV from mother to child 40(28.17%) knew about transmission through blood transfusion and 34(24%) knew that it can transmitted from mother to child by breast feeding. Various misconceptions were also prevailing among them regarding mode of transmission of HIV. 38(26.67%) of them thought it can be transmitted by shaking hands with HIV patient while mosquito bite, sharing food, using clothes of patients and aerosols were considered as modes of transmission by 38(26.67%), 33(23.33%), 31(21.67%) and 19 (13.33%) of the girls respectively. (table 3)

Modes of transmission	frequency	Percentage		
Sexual	71	50		
Blood transfusion	40	46.67		
Sharing needles/syringes	92	65		
From mother to child	66	46.67		
Breast feeding	34	24		
Transmitted by shake hands with HIV patient	38	26.67		
Sharing food	33	23.33		
Mosquito bite	38	26.67		
aerosols	19	13.33		
Cloths	31	21.67		
Table 3: Knowledge about mode transmission of infection				

Knowledge regarding preventive measures: Among those who have heard about HIV when asked for prevention of HIV, 78(55 %) knew about safe injection practices to prevent HIV 64(45%) knew to have safe blood transfusion. 57(40%) knew that person should not have multiple sexual partners. and 57(40%) knew the role of condoms in preventing HIV. (table 4)

Preventive measures	frequency	Percentage		
Prevention by having sexual relationship with single partner	57	40		
Prevention by blood safety	64	45		
Safe injection practices	78	55		
Prevention by use of condoms	57	40		
Table 4: Knowledge regarding preventive measures				

Knowledge about high risk groups for HIV/AIDS: Among all the girls when asked for high risk group for HIV/AIDS most of them said truck drivers are at more risk of having HIV 45(32%). However 36 (25%) said prostitutes, And few of them said that medical workers, low educated people and military people 21(15%) are at risk of getting HIV.

DISCUSSION: In the present study conducted in rural area of Maharashtra among unmarried female adolescent girls the word HIV was heard by 100% of the girls. In the similar study conducted in Bareilly district of UP by Shrivastava Anurag stated that 100% of the adolescent girls had heard about HIV⁴ However in a study conducted by Malleshappa K. in Kuppam mandal taluka of Chittoor district of Andhra Pradesh in persons of age group of 18-30 years 93% of males and 82% of females have heard about HIV.⁵ According to the National Family Health Survey 3 (2005-2006), 64.8% of rural youth had heard of HIV/AIDS at the country level⁶

In present study it was observed that these young girls were less aware about transmission of infection from mother to child and blood transfusion in comparison to other modes of transmission. it is contradictory to the study done by Yadav Sudha B et al. in Jamnagar Gujarat among rural youths where awareness regarding transmission by syringes and mother to child was 87.84 and 83.66 % respectively². In a study conducted in the state of Maharashtra, teenagers were less aware of the role of improperly sterilized syringes and needles as a mode of transmission of HIV in comparison to other modes of disease transmission⁷

There are various misconceptions regarding the transmission of HIV which were revealed in present study. In this study conducted among the adolescent girls it was found that 26.67% of girls thought it could be transmitted by mosquito bite. In study conducted by the Anurag Shrivastava et al it was observed that 20.5% of students thought it could be transmitted by mosquito bite³. Sharing food was also said to be a source of transmission in present study by 23.33% of girls. Anurag Shrivastava et al revealed it to be of 18.5% for the cause of transmission on HIV. Studies done by Sunder N et al⁸ and Francis PT⁹ also supports the above facts.

It had also been observed that 26.67% of the girls thought that it can be transmitted by hand shakes and touching. It is in favour of study conducted by k. Mallsheppa et al among rural youths of Karnataka where 20% of them thought that it can be transmitted by kissing on cheeks.⁵

In the current study 40% students stated that HIV/AIDS can be prevented by having a single sexual partner. This is similar to the observations reported among school adolescents of Gujarat.¹⁰

Our study revealed the present condition of unmarried girls regarding knowledge of HIV/AIDS. Although most of these girls have fairly good knowledge about HIV/AIDS they were confused about the modes of transmission of the disease which needs to be corrected. As this group is the most vulnerable to get the disease because of illiteracy, negligence, shyness, dominance by males thus it is essential to give extra privilege to this weaker section of the society when comes the matter of establishing any HIV related programmes particularly in rural areas. In addition to this, this group of population have relatively poor knowledge regarding fate of the disease and prevention. It seems that HIV/AIDS awareness among these girls is not encouraging. These girls are outside the ambit of the routine government health services. Hence efforts are required on the part of education campaign to make them aware about the high risk behaviour modes of transmission and prevention of HIV/AIDS.

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