



## A study on knowledge about hiv/aids among nursing students in Tirupati

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### Abstract:

**Back Ground:** Each and every HIV positive patient is a potential candidate for disease transmission to the attending health care workers. In future prospect, nursing students are one of the important components of health care delivery system. So they must have proper awareness and knowledge of epidemiology of HIV/AIDS. The accidental transmission of HIV infection to health care workers during occupational exposure is one real threat in world. **Objective:** The objective of the study is to know the existing knowledge about HIV/AIDS among nursing students in Tirupati. **Materials and Methods:** This is a Cross-sectional study done among 196 B.Sc nursing students during december 2012. A pretested, predesigned questionnaire containing questions regarding various epidemiological factors of HIV/AIDS was used. Data was collected from the nursing students after taking the consent. Data was entered into Excel Sheet and analyzed using epi info software 3.5.1 version. **Results & Recommendations:** Deficiencies with regard to HIV transmission, high risk groups, PEP availability was found among study subjects. In the present study, 24.2% had misconception that HIV spreads through insect bite, cough, sneezing, shaking hands etc. 28% & 33% don't know that HIV can be transmitted by vaginal fluids & semen respectively. There is a need to assess knowledge regarding HIV/AIDS and any deficiencies are imparted as required.

**Key words:** Epidemiology; Occupational exposure; Nursing students

### Introduction

According to UNAIDS, in 2010, an estimated 2.6 million people worldwide became newly infected with HIV. For every individual who initiated antiretroviral therapy, two new HIV infections occurred [1]. Globally the percentage prevalence among adults (15–49 years) is 0.8% and half of the Proportion of people who are 15 years and older, living with HIV are women [2].

India has the third largest number of people living with HIV/AIDS. As per the data of 2008-09, in India it was estimated that 23.9 lakh people are currently living with HIV/AIDS and adult prevalence is about 0.3 %. Social mobilization, youth interventions, adolescent education programme and Information, education & communication are the strategic services provided under NACP-III (2007-2012) [3].

Nursing personnel at health care system are in a harmful situation, where they will make a first contact while providing their services as a part of their occupation. At this point, they should have a proper knowledge regarding epidemiological factors of

HIV/AIDS especially the routes of transmission. Hence there is a need to assess the level of knowledge and awareness regarding HIV/AIDS frequently.

### Aim:

The aim of the study is to know the existing knowledge about HIV/AIDS among nursing students of a tertiary care hospital, Tirupati.

### Materials and Methods:

The study design was a cross-sectional, which was done during December 2012 among 196 B.Sc nursing students at SVRR Government General hospital, Tirupati. A pretested, predesigned questionnaire was given to the participants. during their regular class hours after explaining the purpose of the study. Questionnaire contains questions regarding general information, magnitude, mode of transmission, treatment and prevention of HIV/AIDS. Questionnaires were returned anonymously at the end of the allotted class time. Responses to the questionnaire were coded and entered into Excel Sheet.

The responses were analyzed using epi info software 3.5.1 version.

## Results and Discussion:

**Table 1: Age distribution**

Age(years)	N	%
≤19	120	61.2
20-21	64	32.6
≥22	12	6.1
TOTAL	196	100.0

**Table 2: Academic year distribution**

Academic year	N	%
1 <sup>st</sup> year	41	21.0
2 <sup>nd</sup> year	57	29.0
3 <sup>rd</sup> year	73	37.3
Final year	25	12.7
TOTAL	196	100.0

From Table-1, it was found that 120 out of 196 students belong to age group ≤19 years, of them 73 (37.3%) students were from 3<sup>rd</sup> year B.Sc Nursing. Majority (96%) of the students are aware of the full form of HIV and AIDS. In a similar study conducted at Haryana by Sandeep Sachdeva et.al, it was found to be 67.9% and 98.1% respectively [4].

Among the participants, 93.18% (184) students do not know the theme 'Getting to Zero' of World AIDS day-2012. Regarding knowledge about AIDS pathology, 77.5% (152) and 89.8% (176) responded correctly that most common route of transmission is sexual and most common system affected as immune system respectively.

Among the participants, 100% (196), 96.9% (190) and 77.5% (152) responded that HIV can be transmitted by blood transfusion, sexual contact and mother to child respectively. Whereas it was found to be 79.2%, 100% and 92.5% respectively in a study at Haryana [4].

In another study at Kerala [5], it was reported as 88.6%, 91.4% and 14.2% respectively. In the same study [5], only 19.3% answered the correct major

symptoms of AIDS, while in the present study it was found to be 78%.

Regarding spread of HIV, 17.3% (34) of students replied that HIV can be transmitted through Urine, sweat and tears. Almost 50% of the students were not aware that homosexuals, truck drivers and injectable drug users are high risk group for HIV transmission. In the present study, 86.7% (170), 79.5% (156) and 81.6% (160) of students responded that HIV transmission can be prevented by condom, screened blood transfusion and disposable needles respectively, which was found to be 94%, 96% and 96% respectively in a study conducted at Ludhiana [6].

In the same study [6], 20% and 84% of students believed that AIDS is curable and HIV vaccine is available. But in the present study, it was 5.1% (10) and 17.4% (34) respectively.

When it comes to sources of information on HIV/AIDS, most of the students (77.5%) get it from Academic books and Poster Ads. In Ludhiana study [6], majority of the students gain information from TV (100%) and Academic books (96%). In another study at Uttarakhand [7], 92.63% and 89.49% of students opined that TV and Posters are the effective modes for the spread of information on HIV/AIDS.

## Conclusions

Deficiencies with regard to HIV transmission, high risk groups, PEP availability was found among study subjects. In the present study, 24.2% had misconception that HIV spreads through insect bite, cough, sneezing, shaking hands etc. Among the participants, 28% & 33% don't know that HIV can be transmitted by vaginal fluids & semen respectively. 35% were not aware of High risk groups like truck drivers, IDU and homosexuals.

Among the participants, 17% responded that HIV can be transmitted by urine, sweat & tears and HIV vaccine is available. 48% were not aware about availability of HIV PEP for medical personnel.

## Recommendations

There is a need to improve the knowledge about the epidemiology of HIV among the nursing students. Misconceptions regarding HIV/AIDS should be rectified in order to improve the quality of service, so that HIV patients are not discriminated. Regular & periodic training programmes on HIV should be included in the Academic curriculum.

**Table 3: Awareness regarding general information of HIV/AIDS**

Awareness regarding general information of HIV/AIDS	No. (correct)	%
AIDS full form	188	96.0
HIV full form	188	96.0
AIDS discovered in(1981)	46	23.4
First case INDIA in(1986)	74	37.8
First state in INDIA(TN)	100	51.0
Approx. No. of cases at present(35million)	46	23.4
Common test done(ELISA)	190	97.0
ART full form	142	72.4
World AIDS day(Dec 1 <sup>st</sup> )	194	98.8
AIDS day-2012 theme(Getting to zero)	12	6.12
HIV/AIDS international symbol (Red ribbon)	190	96.4
National AIDS Tel. Helpline No.(1097)	22	11.2
Organization in India (NACO)	46	23.4
<b>Knowledge about AIDS pathology</b>		
Most common transmission(Sexual)	152	77.5
Most common system(Immune system)	176	89.8
Most common blood cell(CD4)	108	55.1
Most common disease associated(TB)	156	79.5

**Table 4: Awareness regarding various epidemiological factors of HIV/AIDS**

Routes of transmission	No. (Yes)	%
Blood transfusion	196	100.0
Sexual transmission	190	96.9
Mother to child	152	77.5
Unsterile needles	150	76.5
Sharing utensils	34	17.3
Insect bite	20	10.2
Cough, sneeze	14	7.1
Handshake, kiss	14	7.1
<b>Body fluids proven to spread HIV</b>		
Blood	190	97.0
Vaginal fluids	136	69.4
Semen	126	64.3
Urine,sweat,tears	34	17.3
<b>High risk group for HIV transmission</b>		
Multiple sex partners	190	96.9
Commercial sex workers	146	74.4
Homosexuals	102	52.0

Truck drivers	94	47.9
Injectable drug users	110	56.1
<b>Major symptoms of AIDS</b>		
Prolonged fever	146	74.4
Diarrhoea	138	70.4
>10% body wt. loss	184	93.8
Cough	72	36.7
<b>Preventive measures for HIV transmission</b>		
Disposable needles	160	81.6
Screened blood transfusion	156	79.5
Condom for safe sex	170	86.7
Single and faithful partner	132	67.3
<b>Knowledge about HIV treatment</b>		
AIDS is curable	10	5.1
HIV Vaccine availability	34	17.4
PEP availability	102	52.0
<b>Gain HIV/AIDS information from</b>		
News papers & magazines	132	67.3
TV	138	70.4
Academic books	152	77.5
Poster & Ads	152	77.5
Family, friends & relatives	116	59.2

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