

## A CROSS SECTIONAL STUDY ON KNOWLEDGE OF HIV/AIDS AND WILLINGNESS TO PROVIDE CARE TO INFECTED PERSON BY UNDERGRADUATE STUDENTS OF JHALAWAR

### Community Medicine

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### ABSTRACT

**Introduction:** HIV/AIDS is one of the complex health problems of today's world affecting industrialized and developing countries. Early youth is a vulnerable time for adopting dangerous behaviours as a result of their insufficient psychological development and peer-pressure, which makes them more susceptible to HIV/AIDS. **Aim & Objectives:** To assess and compare knowledge of HIV/AIDS in among undergraduate students of different streams, To know attitude regarding HIV/AIDS and willingness to provide care to infected person. To find out association between knowledge & Attitude regarding HIV/AIDS with their socio-demographic variables. **Methodology:** A cross sectional analytical study was conducted on 526 UG students of 05 Govt. colleges of Jhalrapatan block, Jhalawar, Rajasthan. Using complete enumeration sampling. A pretested semi-structured questionnaire was used to collect information. A total score was generated after assigning one score to each correct response. The outcome was ascertained by using chi-square test. **Result:** Medical students (100%) were the most aware of the causes, methods of transmission, prevention, and treatments for HIV/AIDS, followed by nursing(78.5%), engineering(64.9%), horticulture and forestry(35.2%) and academic(23.1%). Urban students(76.3%) are more aware of HIV than rural(51.4%), and Students who passed their 12th class in private schools(74.8%) had better knowledge than government schools(51.4%). **Conclusion:** This study highlights an overall good level of knowledge on all aspect of HIV except their willingness to provide care. Knowledge of student was significantly good among urban dwellers and student who passed their 12<sup>th</sup> class from private school

### KEYWORDS

HIV/AIDS, Knowledge, Students, Willingness.

### INTRODUCTION

HIV/AIDS is one of the complex health problems of today's world affecting industrialized and developing countries. Asian AIDS epidemic has risen enormously and according to UNAIDS reported(2018) an estimated 310,000 new HIV infections in the Asia-Pacific, bringing the total number living with HIV/AIDS in the region to 5.9 million<sup>1</sup>.

Spreading knowledge and awareness about HIV is one of the major strategies used in the prevention and control of HIV/AIDS around the world.

During the last few decades of past century, early Puberty and the onset of sexual relations observed to be in a dwindling age in many industrialized nation, while the average age of marriage increased. Thus, many teenagers began having sex with one or more sexual partners before marriage, and this contributed to the spread of STDs and HIV. A large proportion of youth in many countries begin sexual activity by the age of 15<sup>2</sup>. The HIV/AIDS epidemic is now increasing rapidly among the youth. Studies have shown that young people make up a significant section of those attending sexually transmitted infection (STI) clinics and people infected with HIV<sup>3</sup>. Program managers and policy makers have often recommended that education institution act as a focal point for the dissemination of information and education on HIV/AIDS.

Young people are more vulnerable due to incomplete social, emotional and psychological development resulting in risky behaviour<sup>4</sup>. In many studies found that patients infected with HIV/AIDS have been known to suffer from stigma and discrimination by the youth as well as HCW<sup>5</sup>. As we knew that injectable drug use and commercial sex were still considered as "social evils" in society; and these social mores, in turn, have the effect of strongly stigmatizing attitudes of young generation and healthcare workers toward patients infected with HIV<sup>6,7</sup>.

We need to in addition focus on this younger generation in particular the college going college students as they constitute the country's future. Due to an increase in the occurrence of HIV in this younger generation the economy of country would be affected considerably unless an addition steps are taken to prevent the transmission of this dreadful sickness<sup>8</sup>.

### AIM:

To assess knowledge of HIV/AIDS and willingness to provide care to infected person among undergraduate students of different streams.

### OBJECTIVE

1. To assess knowledge regarding HIV/AIDS in student of different stream Govt. colleges
2. To know attitude regarding HIV/AIDS and willingness to provide care to infected person among undergraduate students
3. To find association between knowledge & Attitude regarding HIV/AIDS with their socio demographic variables.

### MATERIAL AND METHODOLOGY

**Study Type:** A Cross sectional analytical study

**Study Area:** Jhalrapatan block of Jhalawar district Rajasthan.

**Study Duration:** 3 month after ethical permission.

**Study Population:** All UG student studying in Govt. PG (academic) College, Govt. Engineering College, College of Horticulture and Forestry, Jhalawar Nursing College and Jhalawar Medical College in Jhalrapatan block of Jhalawar district.

### Inclusion Criteria:

1. Undergraduate 3<sup>rd</sup> year student, who presented on day of visit
2. Student who given consent.

### Exclusion Criteria:

1. Student those were absent on data collection day

### Sample Size & Sampling Technique:

Complete enumeration (526) of UG student of a study year of Govt. PG (academic) College, Engineering College, College of Horticulture and Forestry, Nursing College and Medical College in Jhalrapatan block of Jhalawar district.

### Study tool:

Questionnaire contain demographic profile related question and their knowledge & attitude.

### Procedure of data collection:

After ethical approval, we were contact the Principal of concerned college to obtain suitable time slot for conducting studies in their college. After getting principals permission, we organized 15 minutes tutorial for explaining the questionnaire and importance of study to class 3rd year under graduate student to, then after consent the proforma distributed in the same class and after filling there proforma was collected. At the end a seminar was organized to give proper

information about HIV/AIDS, its method of transmission and protective measure to prevent HIV/AIDS transmission.

#### Statistical analysis:

All of details were entered in Microsoft Excel (MS-Excel). IBM SPSS Statistics trial version 23.0 software was used for data analysis.

#### For qualitative data:

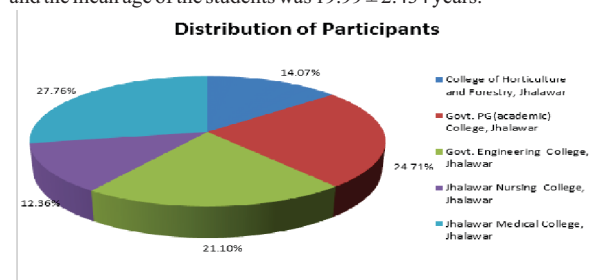
Pearson's chi-square test was applied to test the relationship of categorised independent and dependent variables.

#### Ethical approval:

This study was conducted after getting permission from Departmental Research Review Committee of Community Medicine (PSM) department and institutional ethical committee of Jhalawar Medical College (JMC), Jhalawar. Informed written consent was obtained from study participants.

#### RESULT AND OBSERVATION:

Out of 526 students, 100% had heard about HIV/AIDS. Among the 526 students, 198(37.6%) were females and 328(62.4%) were males. Out of all 307(58.4%) students were belong to rural area of living while 219(41.6%) were belong to urban area. Age varied from 16 to 24 years and the mean age of the students was  $19.99 \pm 2.434$  years.



**Figure 1: distribution of participants in favour of their studied college.**

Above distribution shows that maximum participants were from Medical College (27.76%) and least from Nursing college (12.36%).

**Table no.1: Association of knowledge of HIV/AIDS and attitude different stream of college (n=526)**

| College name                                   | Knowledge       |                  |                   | P-value | Attitude         |                  | P-value | Total N%          |
|------------------------------------------------|-----------------|------------------|-------------------|---------|------------------|------------------|---------|-------------------|
|                                                | Poor N%         | Average N%       | Good N%           |         | Bad N%           | Good N%          |         |                   |
| College of horticulture and forestry, Jhalawar | 22<br>29.6<br>% | 26<br>35.2<br>%  | 26<br>35.2<br>%   | <0.001* | 45<br>60.8<br>%  | 29<br>39.2<br>%  | <0.001* | 74<br>100.0<br>%  |
| Govt. PG(academic) college, Jhalawar           | 30<br>23.1<br>% | 70<br>53.8<br>%  | 30<br>23.1<br>%   |         | 66<br>50.8<br>%  | 64<br>49.2<br>%  |         | 130<br>100.0<br>% |
| Govt. engineering college, Jhalawar            | 12<br>10.8<br>% | 27<br>24.3<br>%  | 72<br>64.9<br>%   |         | 43<br>38.7<br>%  | 68<br>61.3<br>%  |         | 111<br>100.0<br>% |
| Jhalawar nursing college, Jhalawar             | 5<br>7.7<br>%   | 9<br>13.8<br>%   | 51<br>78.5<br>%   |         | 16<br>24.6<br>%  | 49<br>75.4<br>%  |         | 65<br>100.0<br>%  |
| Jhalawar medical college, Jhalawar             | 0<br>0.0<br>%   | 0<br>0.0<br>%    | 146<br>100.0<br>% |         | 22<br>15.1<br>%  | 124<br>84.9<br>% |         | 146<br>100.0<br>% |
| Total                                          | 69<br>13.1<br>% | 132<br>25.1<br>% | 325<br>61.8<br>%  |         | 192<br>36.5<br>% | 334<br>63.5<br>% |         | 526<br>100.0<br>% |

\*indicate significant association (p-value <0.05)

Table no. 1 shows Medical students (100%) were the most aware of the causes, methods of transmission, prevention, and treatments for HIV/AIDS, followed by nursing (78.5%), engineering (64.9%), horticulture(35.2%) and academic (23.1%) as well as good attitude to provide care to infected person is mostly in medical student(84.9%)

followed by nursing (75.4%), engineering (61.3%), academic (49.2%) and horticulture(39.2%). So knowledge of HIV/AIDS and attitude to provide care infected person is significantly associated with different professional colleges. (p<0.001)

**Table no. 2: Association of knowledge of HIV/AIDS and attitude with socio-demographic variables of participants (n=526)**

| Variable       | Knowledge               |                    |                  | P-value          | Attitude       |                  | P-value          | Total (n=526) N%  |
|----------------|-------------------------|--------------------|------------------|------------------|----------------|------------------|------------------|-------------------|
|                | Poor (n=69) N%          | Average (n=132) N% | Good (n=325) N%  |                  | Bad (n=192) N% | Good (n=334) N%  |                  |                   |
| Gender         | Male                    | 37<br>11.3<br>%    | 79<br>24.1<br>%  | 212<br>64.6<br>% | 0.154          | 121<br>36.9<br>% | 207<br>63.1<br>% | 328<br>100.0<br>% |
|                | Female                  | 32<br>16.2<br>%    | 53<br>26.8<br>%  | 113<br>57.0<br>% |                | 71<br>35.9<br>%  | 127<br>64.1<br>% | 198<br>100.0<br>% |
| Area of living | Rural                   | 45<br>14.7<br>%    | 104<br>33.9<br>% | 158<br>51.4<br>% | <0.001*        | 95<br>30.9<br>%  | 212<br>69.1<br>% | 307<br>100.0<br>% |
|                | Urban                   | 24<br>10.9<br>%    | 28<br>12.8<br>%  | 167<br>76.3<br>% |                | 97<br>44.3<br>%  | 122<br>55.7<br>% | 219<br>100.0<br>% |
| 12th education | Govt. school            | 69<br>23.6<br>%    | 73<br>25.0<br>%  | 150<br>51.4<br>% | <0.001*        | 121<br>41.4<br>% | 171<br>58.6<br>% | 292<br>100.0<br>% |
|                | Public & convent school | 0<br>0.0<br>%      | 59<br>25.2<br>%  | 175<br>74.8<br>% |                | 71<br>30.3<br>%  | 163<br>69.7<br>% | 234<br>100.0<br>% |
| Total          |                         | 69<br>13.1<br>%    | 132<br>25.1<br>% | 325<br>61.8<br>% |                | 192<br>36.5<br>% | 334<br>63.5<br>% | 526<br>100.0<br>% |

\*indicate significant association (p-value <0.05)

Urban students (76.3%) are more aware of HIV than rural (51.4%) (p<0.001), and Students who passed their 12th class in public & convent schools (74.8%) had better knowledge than government schools (51.4%) (p<0.001) whereas rural student (69.1%) have good attitude to provide care than rural (55.7%) (p=0.001). Students on basis of 12<sup>th</sup> class education significantly associated with good attitude p value 0.008. There is no significant association of knowledge (p=0.154) and attitude (p=0.811) with gender.

#### DISCUSSION:

Our study shows that there was good awareness and positive attitude about HIV/AIDS in medical related student in Jhalawar district. In the present study majority of study participants had heard of HIV/AIDS. A community based cross sectional study done in Gujarat, India by Yadav BS et al among youths aged 12-24 years to find out the awareness of HIV/AIDS among rural youth reported a similar result<sup>9</sup>. Most of the study subjects knew that HIV and AIDS are different and they both are not one and the same and their knowledge in this regard was satisfactory. A similar study done on school going adolescents by Singh A et al to test their awareness regarding HIV/AIDS in Banaskantha district of Gujarat, India reported a lesser knowledge when compared to the present study<sup>10</sup>. The reason for a lesser knowledge when compared to our study could be due to the age as school going adolescents are younger study subjects when compared to college students.

#### CONCLUSION:

This study highlights an overall good level of knowledge on all aspect of HIV and their willingness to provide care. Knowledge and willingness to provide care to infected person is significantly high in medical field related student. Knowledge of student was significantly good among urban dwellers and student who passed their 12<sup>th</sup> class from private school

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