

## Behaviour Pattern regarding HIV/AIDS among Students of Selected Professional Institutes of Ghaziabad District of Uttar Pradesh

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### Abstract

**Introduction:** The annual number of AIDS-related deaths globally has been decreasing due to the significant scaling up of ART over the past few years. The estimated number of people who died from HIV-related illness in 2009 was 1.8 million. To tackle AIDS, prevention is the most effective and cheapest way and possible through behavioural changes. The college going students of Delhi-NCR are thought to be more enlightened towards HIV infection and don't shy away from indulging or experimenting in risky sexual behaviour. So, the present study was undertaken to assess the high risk behaviour among students of selected professional institutes.

**Material and Methods:** The study was conducted among Students of selected medical, para-medical & other technical institutes in Ghaziabad (U.P.) during February 2011 to August 2011. Data were collected through self administered, well designed pre-tested and close ended study proforma. The information regarding socio-demographic variables and behavioral pattern was collected and analyzed using Epi-info statistical software.

**Results:** All students from professional colleges maximum no. of the students were between less than 20 years age (59.16%). Among 1200 students male students were 868 (72.33%) and female students were 332(27.66%). 188(17%) students responded about presence of sexual activity which they have acquired by virtue of marriage and otherwise respectively 40.42% & 59.58% and that too with a single regular partner 41.48%.

**Conclusion:** Among all respondents predominance of age group of 15-20 years. The most common high-risk group was having sex with multiple partners.

**Keywords:** Behaviour Pattern, Behavioural changes, AIDS, HIV.

### 1. Introduction

Human Immunodeficiency Virus (HIV) is today prevalent in all parts of the world and India with no cure or vaccine as of now in sight for HIV/AIDS, knowledge about prevention of the disease still remains the mainstay of containing this dreaded disease. The annual number of AIDS-related deaths globally has been decreasing due to the significant scaling up of ART over the past few years. The estimated number of people who died from HIV-related illness in 2009 was 1.8 million. [1]

Studies have shown a decrease in the evidence of incidence and safer sexual behavior among young people.

Although the knowledge of the epidemic and how to prevent HIV infection has increased among young people, UNAIDS mentions that there is still a lack of knowledge and the tools required for changing behaviors. To tackle AIDS, prevention is the most effective and cheapest way out that must be given worldwide public health priority. Prevention of HIV/AIDS is possible through awareness and behavioral changes. [2]

Providing young people with basic AIDS education enable them to protect themselves from becoming infected. Young people are often particularly vulnerable to sexually transmitted HIV, and to HIV

infection as a result of drug-use. Acquiring knowledge and skills encourages young people to avoid or reduce behaviors that carry a risk of HIV infection. Even for young people who are not yet engaging in risky behaviors, AIDS education is important for ensuring that they are prepared for situations that will put them at risk as they grow older. [3, 4]

India is one of the largest and most populated countries in the world, with over one billion inhabitants, of which around 2.4 million are currently living with HIV. In terms of AIDS cases, the most recent estimate comes from August 2006, when total number of AIDS cases reported to NACO was 1,24,995. These figures are not accurate reflections of the actual situation as large number of AIDS cases goes unreported. [5, 6]

Most of the initial cases of HIV in India were found by the end of 1987 and occurred mostly through heterosexual transmission. However, at the end of the 1980s a rapid spread of HIV was observed among injecting drug users in 3 north-eastern states in India, which include Mizoram, Nagaland and Manipur. [7]

Urban population figures as most vulnerable segment of society due to concentration of identified high risk behavior groups. Students have special role to play in the transmission as well as prevention of this disease. They themselves are at greater risk of getting the infection through their regular sex partners.

Therefore need to strengthen the knowledge and awareness component among females and males in vulnerable groups i.e. adolescent and early sexually active age is of profound importance. The college going students of NCR are thought to be more enlightened towards HIV infection but they also are apparently more under the influence of western culture and don't shy away from indulging or experimenting in risky sexual behavior. That is why we have planned the present study to assess the high risk behaviour among students of selected professional institutes.

## 2. Material and Methods

### 2.1 Study area

Ghaziabad is situated in north western part of Uttar Pradesh & shares its boundaries with national capital of Delhi, Bagpat, Meerut, Bulandshaher, Jyoterba Phule Nagar and Gautam Budha Nagar of U.P. It has a population of about 32.9 lakhs (2001) census with rural population of 18.16 lakhs and urban 14.74 lakhs. Urban areas are sub divided into 80 wards and rural areas are sub divided into 3 tehsils and 8 blocks.

### 2.2 Study duration

February 2011 to August 2011.

### 2.3 Study design

Cross-sectional study.

### 2.4 Sampling frame

All the students enrolled in medical para-medical and other Technical institutes in district Ghaziabad (U.P.).

### 2.5 Sample unit:

Students of selected medical, para-medical & other technical institutes in Ghaziabad (U.P.).

### 2.6 Sample size

According to NFHS (2005-2006) average age of comprehensive knowledge regarding HIV/AIDS among students of medical, para-medical and other technical institutes is 25%<sup>30</sup>. Taking confidence limit of 95% and required precision of 10%, we calculate the sample size by the formula,

$$n = z.z.p.q/L.L$$

n is the desired sample size

p is prevalence of knowledge, attitude and practice regarding HIV/AIDS, p=25, q=100-p, L=10%, Substituting all the values we get n=1200.

### 2.7 Methodology

The data of the study has been collected by random selection of male and female student volunteer of professional colleges, medical, para-medical & other technical institutes of Ghaziabad (U.P.).

Out of a total of 51 medical, dental para-medical and other technical institutes in district Ghaziabad, 26 institutes were selected by simple random sampling method. Permission from the Head of the selected institute was taken for conducting this study inside the institutes. From each of the selected institutes, 50 students were taken as follows - The numbers of students to be selected for the study were equally distributed according to the structure of the professional course (Year wise) and the study subjects were selected randomly in order to minimize the design effect.

Each of the selected study subjects was given the pre designed and pre tested study proforma, to be filled by the subject himself, which was collected after 1 hrs. The anonymity of the subject was maintained by coding the proforma. The information thus collected was analyzed using percentages.

Some of the selected subjects were resistant or gave incomplete responses. Such subjects were not included in the study and their numbers were compensated by taking extra study subjects.

### 2.8 Inclusion criteria

- Students of selected professional institutes in Ghaziabad district.
- Students who are ready to give consent.

### 2.9 Exclusion criteria

- Faculty of professional institutes.
- Students who are not ready to give consent.
- Students who gave incomplete responses.

Data were collected through self administered, well designed pre-tested and close ended questionnaire.

**2.10 Statistical Methods**

The information regarding socio-demographic variables and behavioral pattern was collected. Data was coded and transferred to a master chart and descriptive tables were prepared and analysed with appropriate statistical methods.

**3.Observations and Results**

Among all students from professional colleges, maximum no. of the students were between less than 20 years age (59.16%) followed by students between 20-25 years age group (34.16%) students between 25-30 years age were (6.41%). Among 1200 students male students were 868 (72.33%) and female students were 332(27.66%).

[Table 1]

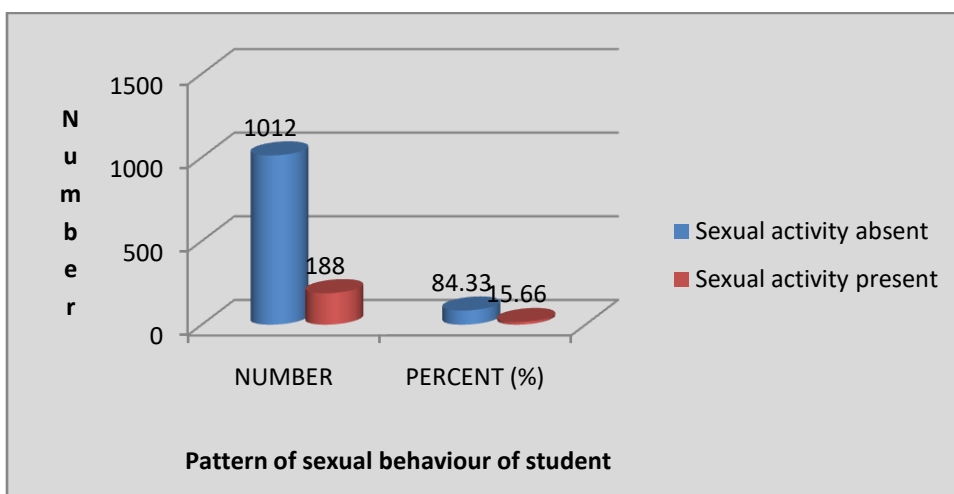
**Table 1: General Distribution of Students according to Age and Sex**

Age (yrs)	Male	Female	Total
Less than 20	550	160	710(59.16%)
20-25	270	140	410(34.16%)
25-30	45	32	77(6.41%)
30-35	03	00	03(0.25%)
Total	868(72.33%)	332(27.66%)	1200

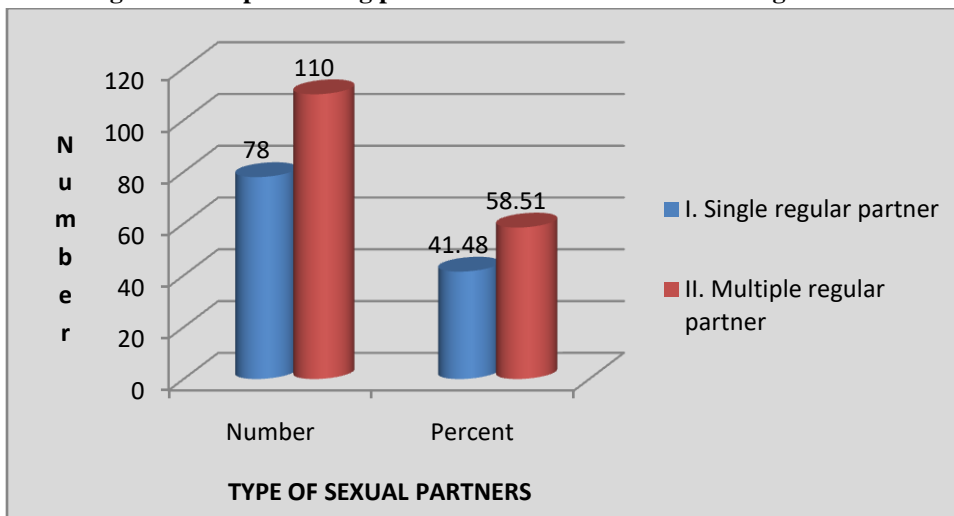
Maximum no of respondents were Hindus 972 (81%) followed by Muslims 138 (11.5%) and others were 90(7.5%). 946 (78.83%) respondents were from upper (general) caste. 198 (16.5%) were Backward and 56 (4.66%) belong to schedule caste/schedule tribe respectively, 188(17%) students responded about presence of sexual activity which they have acquired by virtue of marriage and otherwise respectively 40.42% & 59.58%. And that too with a single regular partner 41.48%. [Table 2, Figure 1, 2]

**Table 2: Pattern of Sexual Behaviour among Students**

Pattern	Number	Percent (%)
Sexual activity absent	1012	84.33
Sexual activity present	188	15.66
a) Opportunity	(n= 188)	
By virtue of marriage	76	40.42
Otherwise	112	59.58
b) Type of Sexual Partners	(n=188)	
Single regular partner	78	41.48
Multiple regular partner	110	58.51
Multiple irregular partner	00	00



**Figure 1: Graph showing pattern of sexual behaviours among students**



**Figure 2: Graph showing Distribution of type of sexual partners**

#### 4. Discussion

The present study has been designed to study the "Behaviour Pattern Regarding HIV/ AIDS among Students of Selected Professional Institutes of Ghaziabad District of Uttar Pradesh ". In present study regarding general information of students most of the students were of age group less than 20 yrs (59.16%) followed by 20-25yrs (34.16%) and among whole 1200 respondents 72.33%(868) were male and 27.66%(332) were female. In the present study (15.66%) students were engaged in sexual activity, 6.34% have acquired by virtue of marriage and 9.33% otherwise.6.5% with a single regular partner, the frequency was in regular majority 6% of students.

While according to Kuete *et al*[8] Study, forty-five per cent of Chinese medical students compared to thirty-six per cent of foreigners preferred to avoid condom use after HIV testing. Thus, the great proportion would allow unprotected sexual intercourse among unknown HIV status person; however, this study found a lower rate of HIV testing among local students. In fact, several previous studies demonstrated the missed opportunities among medical students and healthcare providers to uptake HIV and STIs testing of populations. [9, 10] According to Mhalu *et al* [11], opined that spousal support plays a significant role in reducing behavior for multiple sexual partner and secondary abstinence following HIV diagnosis. Similarly, this study also showed that PLHAs, who had spousal support, significantly had lower high-risk sexual behavior. This shows there is a need to take intervention measures to enhance spousal support to PLHAs. A study by Jones *et al* [12] had illustrated the positive effect of group cognitive behaviour intervention strategy to enhancement in self-efficacy and improvement in communication among high-risk sex groups in India.

#### 5. Conclusion and Recommendations

The study entitled "Behaviour pattern regarding HIV/AIDS among students of selected professional institute of Ghaziabad district of Uttar Pradesh" carried out in the Department of Community Medicine of Santosh Medical College, Ghaziabad and following inferences have been drawn out. Among all respondents predominance of age group of 15-20 years (59.16%) was observed. Among all respondents 91.41% students were unmarried. The most common vulnerable age group was youth as stated by 71.66 %. The most common high-risk group was having sex with multiple partners 81.66%. The least common high-risk group by majority of students was I/V drug users 41.83%. The strengthening the preventive measures for AIDS/HIV elimination should be taken keeping in view of high risk groups and behaviour pattern among them. Introduction of health education in professional studies and integration of multi- sectoral agencies for behaviour modification is need of hour for policy makers.

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