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# To assess the knowledge regarding HIV/AIDS among secondary school and junior college students in khammam town of Andhra Pradesh

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#### Abstract:

**Introduction:** Adolescents and youth need information in order to make such responsible choices in terms of sexual behaviour/relationship. They also need to integrate and personalize this information or knowledge so that they can make healthy choices. Young people learn a great deal from each other and by sharing ideas and experiences amongst themselves. Peer influence is a great motivating factor in the adoption of specific behaviour patterns. Therefore, correct information and values imparted to one group of young people will be passed on to the other young people. Young people who have developed greater self-esteem and mutually supportive relationships are less vulnerable to peer and other pressures. **Materials and Methods: Study Design:** Cross sectional study, **Study period:** The study was carried out from June 2011 to December 2011.

**Results:** Among the participants 92.60 % of secondary school students had heard of HIV/AIDS, had written correct abbreviation of HIV and AIDS, whereas 77.83% of junior college students had heard of HIV/AIDS. Among them 74.06% correct had written abbreviation of HIV and 75.26% had written correct abbreviation of AIDS. Around 78.90% of secondary school students and 83.56% of junior college students knew that causative agent of HIV/AIDS as virus, 76.85% of secondary school students and 77.07% of junior college students gave correct response regarding HIV/AIDS awareness symbol as red ribbon. 42.83% of secondary school and 39.37% junior college students knew how to prevent HIV/AIDS. Nearly 31.34% of secondary school students and 44.95% of junior college students knew that mosquito bite from HIV/AIDS infected person will not transmit HIV virus. Among the secondary school students and 87.62% of junior college students knew that IV drug abuse will spread HIV virus. 75.43% of secondary school students and 87.63% of junior college students responded correctly stating that sharing a meal with HIV/AIDS infected person will not transmit HIV virus. Among secondary school students and 57.67% of junior college students responded that using public toilets will not spread HIV virus. **Conclusion:** Education is currently the only means of preventing the spread of HIV/AIDS. The education which is needed to protect adolescents from the virus and

subsequent disease involves changes at many levels. Individuals and systems have to make changes in their thinking, behaviour, attitudes, beliefs and policies.

Key words: HIV/AIDS; Junior college; Khammam; Knowledge

# Introduction

"AIDS" is the acronym of "Acquired Immune-Deficiency Syndrome" which is a fatal disease described variously as modern plague, modern scourge, devastating disease, insidious microbiological bomb, biological disaster and so-on. It has emerged as an unprecedented pandemic cutting across all boundaries - International, Socioeconomic, Age, Sex and Race. AIDS is already established in several countries of the world, its exponential progression and tremendous impact on mankind is still frightening. HIV (Human Immuno Deficiency Virus) catches persons usually in their prime youth (20-39 years), chistles out immune system, opening avenues for opportunistic diseasesboth infectious and cancerous leading on to exceedingly complex clinical signs and symptoms with high fatality. It is a world health problem of extraordinary scale and extreme urgency. AIDS emerged as one of the most important public health issues of the late twentieth and early twenty- first centuries and is now one of the leading causes of global morbidity and mortality [1]. Adolescents and youth need information in order to make such responsible choices terms of in sexual behaviour/relationship [2]. They also need to integrate and personalize this information or knowledge so that they can make healthy choices. Young people learn a great deal from each other and by sharing ideas and experiences amongst themselves. Peer influence is a great motivating factor in the adoption of specific behaviour patterns. Therefore, correct information and values imparted to one group of young people will be passed on to the other young people. Young people who have developed greater self-esteem and mutually supportive relationships are less vulnerable to peer and other pressures

**Objective:** To assess the knowledge of secondary school and Junior college students regarding HIV/AIDS in Khammam town

# Material and Methods

The study population includes all full time course (on campus study course) students of the secondary schools and junior colleges which were in the field practice area of Urban Health Centre of Mamata Medical College, Khammam. It was a crosssectional study carried out from June 2011 to December 2011. All the students of secondary schools and junior colleges who gave consent for research study were included in the study. Secondary schools and Junior colleges which were outside the field practice of Urban Health Centre of Mamata Medical College, Khammam, were excluded. Students who were not willing to participate or refused to give consent for the study; were excluded. Written permission was obtained from the District Educational Officer (DEO) and District Vocational Officer (DVO) of Khammam district and Institution Heads to carry out the study. They were consulted for information regarding number and type of colleges and their location; he issued letters to concerned schools and colleges for their cooperation. Verbal Consent from students was obtained before the study. The students were administered questionnaire. Survey questionnaire was initially designed and developed in English and translated to Telugu and then back to English to check for consistency and clarity taking in to account similar surveys that have been carried out previously and some questions were modified to suit the context of the study.

# Results

In this study population 635(48.92%) were males and 663 (51.08%) were female participants. Among male participants majority (20.18%) was of 16-17 age group and majority (16.87%) of female participants were of 14-15 age group. (Table: 1)

In this study population among male students majority (16.18%) were studying Intermediate first year and among female students majority (19.34%) were studying Intermediate second year. The total study participants were 1298 among them 635 (48.92%) were males and 663 (51.08%) were females. (Table: 2)

Among the participants 92.60 % of secondary school students had heard of HIV/AIDS, had written correct abbreviation of HIV and AIDS, whereas 77.83% of junior college students had heard of HIV/AIDS. Among them 74.06% correct had written abbreviation of HIV and 75.26% had written correct abbreviation of AIDS. Around 78.90% of secondary school students and 83.56% of junior college students knew that causative agent of HIV/AIDS as

virus, 76.85% of secondary school students and 77.07% of junior college students gave correct response regarding HIV/AIDS awareness symbol as red ribbon. 42.83% of secondary school and 39.37% junior college students knew how to prevent HIV/AIDS. Nearly 31.34% of secondary school students and 44.95% of junior college students knew that mosquito bite from HIV/AIDS infected person will not transmit HIV virus. Among the secondary school students 33.39% and 57.62% of junior college students knew that IV drug abuse will spread HIV virus. 75.43% of secondary school students and 87.63% of junior college students knew that HIV/AIDS status can be confirmed by blood test. 46.14% of secondary school students and 56.56% of junior college students responded correctly stating that sharing a meal with HIV/AIDS infected person will not transmit HIV virus. Among secondary school students nearly 53.70% and 57.47% of junior college students responded that using public toilets will not spread HIV virus. (Table: 3)

# Discussion

Of the total 1298 study participants, 635(48.92%) were males and 663(51.08%) were female participants. Among male participants majority (20.18%) were of 16-17 age group and majority (16.87%) of female participants were of 14-15 age group. (Table:1). The mean age of participants is 15 years with SD of 2.025. More than half of the respondents were females (51.08%).

Among the participants, 92.60 % of secondary school students had heard of HIV/AIDS, had written correct abbreviation of HIV and AIDS, whereas only 77.83% of junior college students had heard of HIV/AIDS. Among them 74.06% had written correct abbreviation of HIV and 75.26% had written correct abbreviation of AIDS. In a study done by Bhalla S et al in Gujarat reported that all participants heard of HIV/AIDS and of them only 60.6% participants had written correct abbreviation of HIV and 87.7% had written correct abbreviation of AIDS [3] In a study done by Abdul Basir Mansoor in Afganisthan reported that 90.8% of participants aware of HIV/AIDS [4]. In a study done by Lal P et al in Delhi among senior secondary school children reported that all participants heard of HIV/AIDS and of them only 19.9% participants had had written correct abbreviation of HIV and 51.4% had written correct abbreviation of AIDS [5].In a study done by Basir Gaash in Srinagar reported that 76% of participants were aware of HIV/AIDS [6] and 83.56% knew that causative agent of HIV/AIDS as

virus, 75.26% had written correct abbreviation of AIDS. In this study 78.90% of secondary school students and 83.56% of junior college students had responded correctly regarding the causative agent causative agent of HIV/AIDS as virus. In a study done by Singh Sk et al [7] in Kanpur reported 62.5%, Bhalla S et al [3] in Gujarat reported 90.5% participants had mentioned virus as the causative agent of HIV/AIDS.

In this study 42.83% of secondary school and 39.37% junior college students knew how to prevent HIV/AIDS. In a study done by Lal P et al in Delhi among senior secondary school children reported that 72% of participants knew how to prevent HIV/AIDS [5]. In this study 61.89% of secondary school students and 57.01% of junior college students had wrong perception regarding the availability of vaccine for HIV/AIDS; Benera SK et al in their study on under graduates at Delhi University reported that 59% knew that vaccination cannot prevent HIV/AIDS infection [8].In this study 75.43% of secondary school students and 87.63% of junior college students knew that HIV/AIDS status can be confirmed by blood test, which is nearer to the study of Selcuk Koksal et al in Turkey reported that 88% knew that HIV could be detected through blood test [9].

In this study 56.38% of secondary school students and 74.66% of junior college students knew that hugging and shaking hands with HIV/AIDS infected person will not transmit HIV virus. In a study done by Singh Sk et al [7] reported 53.9% of participants, Selcuk Koksal et al [9] reported 73.1%, by Basir Gaash et al [6] reported 82.22%, Bhalla S et al [3] reported 90.8% knew that shaking hands with HIV/AIDS infected person will not transmit HIV virus. Singh Sk et al [7] reported 52.33% and Bhalla S et al [3] reported 90.8% knew that hugging with HIV/AIDS infected person will not transmit HIV virus. Nearly 31.34% of secondary school students and 44.95% of junior college students knew that mosquito bite from HIV/AIDS infected person will not transmit HIV virus which was similar to study done by Singh Sk et al [7] reported 44.67% of participants, Selcuk Koksal et al [9] reported 58.3% of participants knew that mosquito bite from HIV/AIDS infected person will not transmit HIV virus. Whereas in a study of Lal SS at al [10] reported 70.04% knew that mosquito bite from HIV/AIDS infected person will not transmit HIV virus. In this study 76.22% of secondary school students 78.58% of junior college students knew that sharing injections, needles and razors with a HIV/AIDS infected person will transmit HIV virus.

In a study done by Basir Gaash et al [6] reported 23.11% of participants, Bhalla S et al [3] reported 96.6%, Rekha Udgiri et al [11] reported 50.35% and Lal P et al [5] reported 44.4% of participants knew that sharing injections with a needle from an HIV/AIDS infected person will transmit HIV virus.

This study reported 72.13% of secondary school students and 79.03% of junior college students knew that infected blood transfusion will spread HIV virus, which was similar to study done by Basir Gaash et al [6]] reported 73.3% of participants, Kamala BA et al [12] reported 75.5%. In contrary Rekha Udgiri et al [11] reported 58.15% and Lal P et al [5] reported 31.1% Bhalla S et al [3] reported 96.65% of participants knew that infected blood transfusion will spread HIV virus. About 33.39% of secondary school students and 57.62% of junior college students knew that IV drug abuse will spread HIV virus in this study. Bhalla S et al [3] reported 84% of participants knew that IV drug abuse will spread HIV virus. In this study 53.70% of secondary school students and 57.47% of junior college students knew that using public toilets will not spread HIV virus, in contrary Lal SS et al [10] in their study reported that 83.5% felt that by using public toilets will not spread HIV virus.

#### Conclusion

Education is currently the only means of preventing the spread of HIV/AIDS. The education which is needed to protect adolescents from the virus and subsequent disease involves changes at many levels. Individuals and systems have to make changes in their thinking, behaviour, attitudes, beliefs and policies. Government should regularly organize and sponsor teachers to attend in workshops, where clarifications could be sought from experts on areas of misunderstanding. Development of an effective and proper HIV/AIDS unit in the science curriculum should be considered.

### References

1. Wallace/Maxcy- Rosenau-Last. Text book of public health and preventive medicine. 15th ed. Mc Graw Hill. Chapter 11, The Epidemiology and Prevention of Human Immunodeficiency Virus (HIV) infection and Acquired Immunodeficiency Syndrome (AIDS). p.189.

2. Park K. Park's text book of preventive and social medicine. 21st ed. Jabalpur: M/s Banarsidas Bhanot; 2011. Chapter 5, Epidemiology of Communicable Diseases: AIDS. p. 316-29.

3. Bhalla S, Chandwani H, Singh D, Somasundaram C, Rasania SK, Singh S. Knowledge about HIV/AIDS among senior secondary school students in Jamnagar, Gujarat. Health Popul Perspect Issues. 2005; 28:178–88.

4. Mansoor AB, Fungladda W, Kaewkungwal J, Wongwit W. Gender differences in KAP related to HIV/AIDS among freshmen in Afghan universities. Southeast Asian J Trop Med Public Health. 2008 May; 39 (3):404-18.

5. Lal P, Nath A, Badhan S, Ingle GK. A Study of Awareness about HIV/AIDS Among Senior Secondary School Children of Delhi. Indian J Community Med. 2008 Jul; 33 (3):190-2.

6. Basir Gaash, Muzaffar Ahmad, Rehana Kasur, Shabnam Bashir (2003) Knowledge, Attitude and Belief on HIV/AIDS Among the Female Senior Secondary Students in Srinagar District of Kashmir, Health and Population-Perspectives and Issues: 26 (3) 101-109.

7. Singh SK, Saxena A, Krishna G. A profile of HIV infection / AIDS related knowledge among female students of Kanpur district, India. Kathmandu Univ Med J (KUMJ). 2007 Jan-Mar;5(1):27-31.

8. Benara S.K., Khelendra R.K., Chaudhry B.N., Ramaswamy J., Bhattacharaya J, Chawla J. et al. : AIDS - a survey of knowledge, attitudes & beliefs of undergraduate students of Delhi University - Indian J. Com. Medicine 1992; 17(4) : 155-59.

9. Selcuk Koksal, Necmi Namal, Suphi Vehid and Eray Yurtseve. Knowledge and Attitude Towards HIV/AIDS Among Turkish Students. Infectious Diseases Journal of Pakistan. Oct - Dec 2005.118-21.

10. Lal SS, Vasan RS, Sarma PS, Thankappan KR. Knowledge and attitude of college students in Kerala towards HIV/AIDS, sexually transmitted diseases and sexuality. Natl Med J India. 2000 Sep-Oct;13(5):231-6.

11.Rekha Udgiri, M.C. Yadavannavar, M.M. Angadi, Sharvanan E. Knowledge about HIV/AIDS among First Year Medical Students. Al Ame e n J Me d S c i (2011) 4 (3): 280 - 282.

12. Kamala BA, Aboud S. Knowledge, Attitudes And Practices On Hiv Prevention Among Secondary School Students In Bukoba Rural, Kagera Region-Tanzania, Del Rio C. Dar es Salaam Medical Students Journal. Vol. 14 No. 14 1 April 2006, p 14-8.

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Age groups participants	s of study (in years)	12-13	14-15	16 -17	18 & above	Total
Gender	Male	86 (6.63)	226 (17.41)	262 (20.18)	61 (4.70)	635 (48.92)
	Female	104 (8.01)	219 (16.87)	248 (19.11)	92 (7.09)	663 (51.08)
	Total	190 (14.64)	445 (34.28)	510 (39.29)	153 (11.79)	1298 (100)

Table 1: Distribution of study participants according to their age group and gender

## Table 2: Distribution of study participants according to their education status and Sex

Education study par	status of ticipants	VIII class	IX class	X class	Inter 1 year	Inter 2 year	Total
Gender	Male	91 (7.01)	97 (7.47)	124 (9.55)	210 (16.18)	113 (8.71)	635 (48.92)
	Female	99 (7.63)	107 (8.24)	117 (9.01)	89 (6.86)	251 (19.34)	663 (51.08)
	Total	190 (14.64)	204 (15.72)	241 (18.56)	299 (23.04)	364 (28.04)	1298 (100)

Table 3: Distribution of study participants according to their knowledge about HIV/AIDS- Correct Responses

Response of study participants	Response of secondary school students (n=635)	Responseofjuniorcollegestudents(n=663)
Heard of HIV/AIDS	588 (92.60)	516 (77.83)
Full form of HIV	588 (92.60)	491 (74.06)
Full form AIDS	588 (92.60)	499 (75.26)
Causative agent of HIV/AIDS as virus	501(78.90)	554 (83.56)
Symbol of HIV/AIDS awareness is red-ribbon	488(76.85)	511(77.07)
HIV/AIDS can be prevented	272(42.83)	261 (39.37)
No vaccine for HIV/AIDS	242(38.11)	285 (42.99)
HIV/AIDS status can be confirmed by blood test.	479(75.43)	581 (87.63)
Sharing a meal with HIV/AIDS infected person will not transmit the virus.	293(46.14)	375 (56.56)
Hugging and shaking with HIV/AIDS transmitted person will not transmit HIV virus	358(56.38)	495 (74.66)

Mosquito bite from HIV/AIDS infected person will not transmit HIV virus	199(31.34)	298 (44.95)
sharing injection, needles, razors with a HIV infected person will transmit HIV virus	484(76.22)	521 (78.58)
Infected blood transfusion will spread HIV virus	458(72.13)	524 (79.03)
IV drug abuse will spread HIV virus	212(33.39)	382 (57.62)
Using public toilets will not spread HIV virus	341(53.70)	381 (57.47)
Sexual contact with HIV effected people will spread HIV virus	214(65.20)	505 (76.17)
Faithful and infected sexual partner will protect them from HIV/AIDS	432(68.03)	405 (61.09)

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