

KNOWLEDGE ATTITUDE AND PRACTICE STUDY ON HIV / AIDS AMONG 1ST YEAR MBBS MEDICAL STUDENTS & 1ST YEAR B.Sc. NURSING STUDENTS IN A PRIVATE MEDICAL COLLEGE IN W G DIST, AP



Paediatrics

Dr. C. Suryanarayana Vittal

Associate Professor, Department of Pediatrics, Alluri Sitarama Raju Academy of Medical Sciences, Eluru, West Godavari District, Andhra Pradesh 534005, India

Dr. G. Krishna Murthy*

Professor, Department of Microbiology, Alluri Sitarama Raju Academy of Medical Sciences, Eluru, West Godavari District, Andhra Pradesh 534005, India*Corresponding Author

ABSTRACT

INTRODUCTION: HIV/AIDS is recognized as a national priority health issue in most of the developing countries including India. In spite of several efforts from the governmental and voluntary organizations, the awareness about various aspects of this deadly infection is still not up to the expectations among the public. One of the important stakeholders in the spread of knowledge being the medical personnel, the HIV/AIDS awareness is of utmost important amongst the young adolescents especially related to the medical profession

This survey is undertaken in order to assess the current knowledge about HIV/AIDS and their attitudes towards people living with problem amongst the 1st year students of M.B.B.S. and B.Sc. Nursing. The results will give administrators and teachers a clear direction to enable the youngsters in their knowledge and train them in proper direction to spread their knowhow to general public too.

OBJECTIVES:

- To assess the existing knowledge amongst the students about HIV/AIDS
- To observe if there are any major differences between medical and nursing students?

AIM: To postulate the guidelines for the stakeholders in proper spread of knowledge about HIV/AIDS amongst the important sections of the society

SUBJECTS & METHODS: Students of 1st MBBS and B.Sc. Nursing in a Private Medical Institute in West Godavari District, Andhra Pradesh

STUDY DESIGN: Cross sectional observatory study

STUDY PERIOD: November, 2019

METHODOLOGY: A structured questionnaire of 20 questions given to the students to fill in within a reasonable time period.

EVALUATION: The answers received were analysed using MS access and MS excel and analyse using statistical package of SPSS v 25, evaluation edition and GraphPad online.

RESULTS:

1. 97 % of students know that HIV/AIDS is sexually transmitted disease
2. For a large majority of the students the major source of their knowledge about HIV/AIDS is from their teachers followed by Media/Literature.
3. If in a hypothetical situation of having accidentally exposed to HIV infection, 54 % students preferred to consult a doctor first, whereas 41% wanted to confirm it through laboratory study before taking any initiative.
4. Surprisingly nearly one fourth of the students studied believed that there is a potent vaccine against HIV infection!
5. Significant differences found in knowledge and attitudes between different sections of students, both on the course of studies and on gender basis too.

CONCLUSIONS: The knowledge about the HIV/AIDS among fresh medical graduates is on an average level. Some misconceptions about HIV transmission, risky behaviours and discriminatory attitudes were observed among participants that call for concern and must be addressed

KEYWORDS

HIV; AID, Exposure; Prophylaxis, Contact; STDs, Seropositive,

INTRODUCTION:

Human Immuno-deficiency Virus infection and the consequent Acquired Immunodeficiency Syndrome continues to be a major health hazard having consumed the lives of nearly 32 million people since its recognition. There were approximately 37.9 million people living with HIV at the end of 2018.¹

Lack of a curative therapy and vaccine to prevent it mandates a need for ongoing and consistent health education, particularly among young adults who are prone to high risk behaviour. Unprotected sex is the most common route of HIV infection among young people. Low HIV and sexual health knowledge is a key barrier to reducing HIV infections among young people. Knowledge, attitudes and practices (KAPs) regarding HIV/AIDS is one of the corner stones in the fight against the disease. Youths are most vulnerable to infection because they engage in risky practices due to a lack of adequate information. One of the important stakeholders in the spread of knowledge being the medical personnel, the HIV/AIDS awareness is of utmost important amongst the young adolescents especially related to the medical profession.²

Thus, evaluating their knowledge, attitudes and practices will help in designing appropriate prevention strategies of HIV spread. This study was aimed at assessing the KAPs of fresh medical students in a private medical college in W Godavari dist.

REVIEW OF LITERATURE:

According to the 2017 UNAIDS data, new HIV infections in India have decreased by 46%, and AIDS-related deaths have decreased by 22% since 2010. National Strategic Plan (NSP) for HIV/AIDS and STI 2017 – 2024 aims at 75% reduction in new HIV infections. Nearly 90% of those who know their status are on treatment and 90% of those who are on treatment experience effective viral load suppression. The goal now is to achieve zero new infections, zero AIDS-related deaths, and zero discrimination.

Subbarao NT, Akhilesh A. (2017) in a descriptive cross sectional study to assess the knowledge, awareness and attitude of college students about STIs other than HIV. A total of 350 engineering students from various semesters were included in the study. Almost 75% of the students knew about the modes of transmission of STIs. Less than 50% of the participants knew about the symptoms of STIs and complications. Also attitude of the students towards sexual health and prevention of STIs was variable.⁴

Doda A, Negi G, et al (2018) A cross-sectional KAP survey was conducted among five groups comprising consultants, residents, medical students, laboratory technicians, and nurses in Uttarakhand. Most participants had incomplete knowledge regarding the various aspects of HIV/AIDS. Attitude in all the study groups was receptive toward people living with HIV/AIDS. Poor knowledge about HIV

infection, particularly among the young medical students and paramedics, is evidence of the lacunae in the teaching system.⁵

Jahanfar S, Lim AW, Loh MA,(2008) to measure the effectiveness of two hours talk on sex education offered by a non-governmental organization (NGO) in improving youngsters' knowledge and perception towards HIV and AIDS.

Ali A, Ali NS, Nasir U, Aadil M, Waqas N et al (2018) made a comparative study knowledge and attitudes of medical and dental Students towards HIV/AIDS in Pakistan. Their results indicated lack of knowledge about HIV, especially about the modes of transmission and prevention techniques. Therefore, they suggested regular interactive workshops and seminars, besides teaching sessions, focused lectures on HIV/AIDS, need to be conducted.⁶

Saeed AK, Siddiqui N, Inayat A. (2001) in Pakistan. The knowledge about HIV spread increased by 28.96% for the students and 19.54% for the teachers, while the net gain in attitudes was 36.16% for the students and 71.43% in the teachers. They concluded that short workshops on the Themes of World AIDS Days are very beneficial for improvement in the level of awareness for HIV/AIDS prevention and control.

STUDY AIM:

To understand the present levels of awareness about the HI/AIDS amongst teenagers of medical profession.

OBJECTIVES:

1. To postulate the guidelines for the stakeholders in proper spread of knowledge about HIV/AIDS amongst the important sections of the society.
2. To observe if there are any major differences between medical and nursing students?
3. To develop evaluation methodology to assess effectiveness of the teaching methodology

SUBJECTS:

First year students of M.B.;B.S. and B.Sc. Nursing of the year 2019. A total of 234 students of Alluri Seetharamaraju Academy of Medical Sciences were enrolled for this study on a voluntary basis.

METHODOLOGY:

- A structured questionnaire of 20 self-assessment queries covering knowledge and attitude aspects on HIV/AIDS was prepared and given to the students in a printed format.
- All participants were informed about the seriousness and importance of the study prior to answering of questions.
- Students were given the opportunity to fill in a reasonable time period
- The filled-up forms were collected digitized and analyzed in MS Excel and MS Access
- Information provided by the participants was anonymous and was kept confidential.
- The questionnaire contained 15 questions to assess the existing knowledge and 5 questions to assess their attitudes and practical aspects of HIV/AIDS

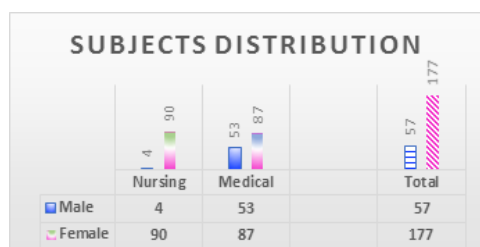
DATA ANALYSIS: Data was entered using MS Access frontend and tabulated in MS Excel and statistical analysis done using online GraphPad and evaluation version of SPSS version 25 software

OBSERVATIONS AND RESULTS:-

The study population comprised of 234 students in all from MBBS and B Sc nursing courses. The average age of the subjects is 19 years. The study period was the month of November 2019.

Structure of the participants:

Fig 1



Analysis of answers to the questionnaire:

HIV Infection is one of the Sexually Transmitted Infections:

Only 5 medical students and 2 nursing students wrongly believed that HIV is not a sexually transmitted disease. All the rest do know that HIV is a type of STD.

Full for of abbreviations HIV, AIDS and STI

About 39% of Nursing students and 10% of Medical students could not give proper full form of HIV abbreviation. Whereas the full form of AIDS was mentioned wrongly by 10 % of Nursing Students and 5 % of Medical students

Knowing the Expansion of STI:

Table 1

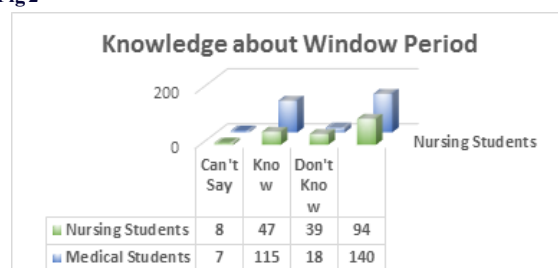
	Know	Don't Know	Can't say
Medical	121	7	12
Nursing	66	9	19

Pearson Chi-Square: 9.33 with a *p* value of 0.009

Knowledge about Window Period after HIV infection:

41% of nursing students are unaware of the existence of Window Period after HIV exposure. However such misconception was seen in only 13% of medicos. The difference between the two categories is highly significant. Pearson Chi-Square:28.4; *P* value: <0.001.

Fig 2



Knowledge about various risk factors:

Almost all the students are aware that sharing of needles and razors could be a potential risk factor in HIV transmission 15% of medicos and 20 % of nursing students believe that HIV can be transmitted through mosquito bites.

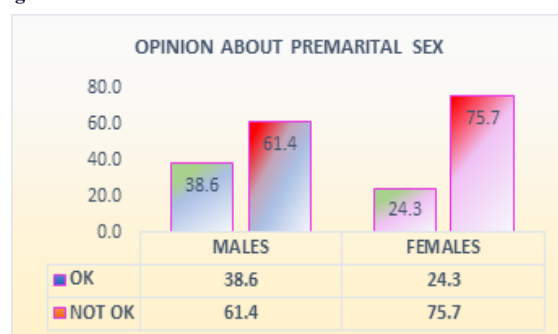
11% of medical students and 17 % of nursing students believe that sharing of food with infected person may spread HIV 35% of medicos and 60% of nursing student do not have the idea that breast feeding is a risk factor for the vertical transmission of HIV from mother to child.

Surprisingly 55% of nursing students felt that sharing of clothes could be a risk factor for HIV transmission, whereas such unawareness is shared by only 7% of medical students

Attitude about premarital sex:

About 27% of all the students opine that premarital sex is not objectionable.

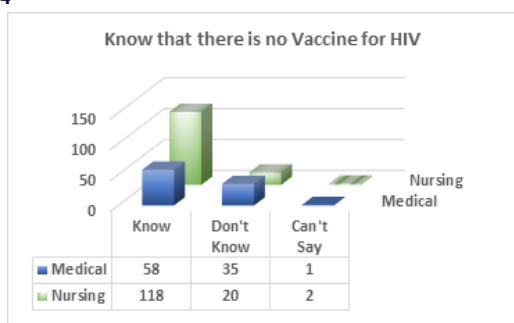
Fig 3



Knowhow about the availability of a preventive Vaccine:

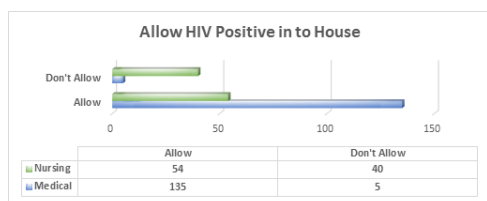
37% of nursing students think that there is a potent vaccine available to prevent HIV/AIDS but such misinformation is with only 14 % of medicos. Pearson Chi-square:16.47 and a *p* value < 0.001

Fig 4

**Attitude towards PLWHAs:**

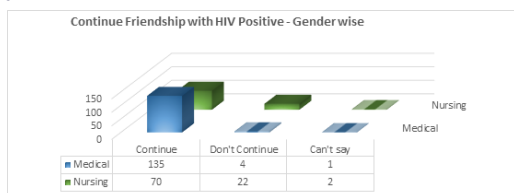
Regarding attitude towards people living with HIV/AIDS, 96% medicos are willing to allow a HIV positive person in home, but only 56% of nursing students willing to do so. (Chi Square: 55.0 and p value <0.001)

Fig 5



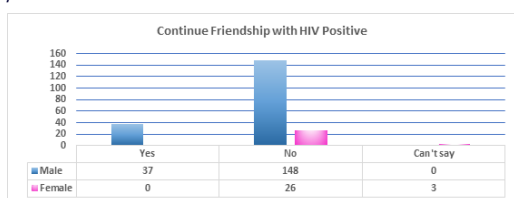
Almost all the medical students and 3/4th of the nursing students feel that they do continue to be friendly with a friend even if he/she is found to be positive for HIV. The difference is statistically significant. Chi square: 25.34, P value <0.001

Fig 6



The gender difference also is significant in this between male and female. Chi square:10.66 and P value 0.005

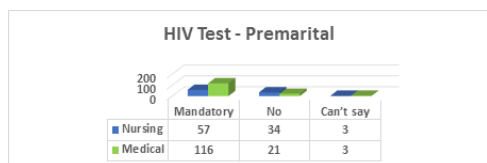
Fig 7



About 90% medicos know that prior consent is necessary for ordering a HIV test, but only to 65% nursing students are aware of this. (Chi square 21.28, P value <0.001)

84% of medical students are unaware of post exposure prophylaxis against HIV, while this unawareness is seen in only 63% of nursing students Premarital HIV screening is mandatory - was felt by 83% medicos and 60% nursing students and the difference is significant. Chi square: 14.7 and p value 0.001.

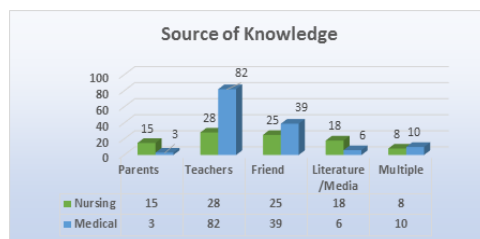
Fig 8



However, when we analysed the same based on gender, the difference is not significant.

Source of their information:

Fig 9



Teachers are main source for their information for medical students, whereas the proportion of learning from teachers and friends is almost equal with nursing students. The difference is statistically significant. (Chi square: 36.14, p value: <0.001)

On a hypothetical situation of exposure to HIV majority of students preferred to consult a doctor first, followed by going in for a lab confirmation

DISCUSSION:

The spread of HIV/AIDS worldwide remains on the rise especially among adolescents who are at increased risk of infection. Although HIV knowledge is very important, it may not necessarily be the primary factor in explaining HIV transmission among young people. Many young people have adequate knowledge about HIV but fail to act on it due to a wide variety of social, cultural and economic constraints or just out of pure negligence.

Television/radio was the most common sources of information for 135 (90%) subjects according to Gupta M, Mahajan VK et al study done in North India.³ In our study, most of the students mentioned teachers as the main source of their information, followed by friends.

Majority of the students would prefer to get confirmation by a doctor in a hypothetical situation of having exposed to HIV positive source. Confirming by a lab investigation was second popular response.

Premarital sex was not a taboo for about 28% of students irrespective of their line of studies and gender (p value of 0.11). Though this is not a moral issue, increase in number of sexual partners is a definite risk factor for HIV.

When we tried to look for any differences between the subject groups, we found statistically significant differences between medical and nursing students in several aspects like, knowledge about the full form of STI, about the window period after HIV exposure, knowledge about the absence of an effective vaccine against HIV and the main sources of their information about HIV/AIDS. In the attitude aspects also there is significant differences found between these two groups with regard to their approach to people living with HIV/AIDS (PLWHAs). While analysing the gender differences, we found significant differences between the boys and girls in ideas like premarital sex ($p < 0.001$) and continuing friendship with a HIV positive friend ($p = 0.005$).

On a hypothetical situation of having exposed to HIV infection, 71% medicos and 60% nursing students preferred to consult a doctor While Hamid Albujeer AN, Shamshiri AR, Taher A et al tried to grade the students based on their knowledge levels, we did not attempt any such grading but analysed them on individual points of interest only.¹¹

Because this questionnaire was self-administered, social desirability bias may have occurred. However, the anonymity of the questionnaires hopefully encouraged students to be honest in their responses. Despite all of these limitations, we believe this study might be a reasonable source of information for researchers and policymakers.

Action Taken:

Results of our study were brought to the notice of concerned authorities for further follow-up and needed strategy development for the noble cause of HIV prevention.

CONCLUSIONS:

Our study also shows that there is a lacuna in the knowledge about certain aspects of AIDS such as modes of transmission and prognosis. Some misconceptions about HIV transmission, risky behaviours and discriminatory attitudes were observed among participants that call for

concern and must be addressed promptly. Sexual education in schools, should be reinforced to correct the misconceptions observed in this study and encourage safe practices and positive attitudes towards PLHIV. This lacuna has to be filled in by initiation of AIDS awareness programme in their study quite early itself by modifying the undergraduate medical curriculum.

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