Original Research Article

Assessment of knowledge, attitude and practice among B.Sc. Nursing students towards care of HIV/AIDS patients at Geetanjali College of Nursing, Udaipur: a cross sectional study

Divya Jain, Hemlata Mittal*, Mukul Dixit, Jyoti Jain, Sachin Sharma, Anmol Khandelwal, Amit Kumar

Department of Community Medicine, Geetanjali Medical College, Udaipur, Rajasthan, India

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*Correspondence:
Dr. Hemlata Mittal,
E-mail: drhemmittal@gmail.com

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ABSTRACT

Background: HIV and AIDS is a matter of concern because the number of cases has increased dramatically over the last ten years. Health care workers are key players in the prevention and management of HIV-infection. The perceptions regarding Human Immunodeficiency Virus (HIV)/AIDS and practices among the Health Care Workers (HCW) exists many misconceptions with regard to HIV/AIDS. Many health workers are not willing to provide the necessary care and services to the HIV/AIDS infected patients. Health Care Workers need to have appropriate knowledge and attitudes about HIV and AIDS.

Methods: A cross sectional study was conducted at Geetanjali College of Nursing, Udaipur from June 2014 to August 2014 among randomly selected 100 B.Sc. Nursing Students on a pretested, precoded and prestructured self administered questionnaire included sections on knowledge, attitude, and practice toward HIV/AIDS after having oral/ written consent.

Results: In this study, there were 58 (58.0%) males and 42 (42.0%) females. 97 (97.0%) assumed multiple sex partners is the reason for HIV transmission. 68 (68.0%) had no objection in doing the work with HIV positive staff and 51 (51.0%) were aware about the transplacental route of transmission of HIV. As well as 67 (67.0%) were in favour of early sex education.

Conclusions: With the above findings it has to be state that there are gaps in the knowledge of Nursing Students about HIV infection, additional HIV/AIDS training for health staff as well as sensitization to the various aspects of disease through an active health education programme is crucial to control the HIV epidemic. There is also a need of reconstruction in nursing curriculum programmes to ensure that the nursing students have to gain the necessary accurate knowledge and appropriate attitudes about HIV and AIDS.

Keywords: Sensitization, HIV/AIDS, Prevalence

INTRODUCTION

In 1986, the first known case of HIV was diagnosed by Dr. Suniti Solmon amongst female sex workers in Chennai, since then AIDS epidemic has grown steadily. Human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) are among the greatest public health challenges around the globe because the number of cases has increased dramatically over the last ten years. There is a lack of therapeutic choices that assure the cure or prevent further progression of disease and its complications, in
spite of advances in modern medicine. The main factors which have contributed to India's large HIV-infected population are personal, social, bio medical waste disposal, economic, cultural, and other intricately related factors.

National AIDS control Programme (NACP) in India is completely centrally sponsored for prevention and control of HIV implemented through State AIDS Control Societies in the states. It has evolved three phases of implementation and currently in the fourth phase and globally acclaimed as most successful programme.

As per the India HIV 2015 estimation report, HIV prevalence in India was estimated as 0.26% (0.30% for males and 0.22% for females). At the end of 2016, there are 36.7 million people living with HIV and 30% don’t know their status, 19.5 million people were accessing antiretroviral therapy, 1.8 million [1.6 million–2.1 million] people became newly infected with HIV, 1 million [830,000–1.2 million] people died from AIDS-related illness. The severity can be accessed easily with the data that 76.1 million [65.2 million–88.0 million] people have become infected with HIV while 35.0 million [28.9 million–41.5 million] people have died from AIDS-related illnesses from the start of the epidemic according to UNAIDS data on global HIV and AIDS statistics. More than 95% of patients were in age group of 20-49 years and the mean age was 33.92 year. It clearly indicates that it is the young and productive population which is mostly affected by the disease. Majority of patient were males (65/102) and male to female ratio was 1.81. Females acquired the disease earlier than the males (33.75 vs. 34.09).

Health care workers are key players in the prevention and management of HIV-infection. The perceptions regarding Human Immunodeficiency Virus (HIV/AIDS) and practices among the health workers exists many misconceptions with regard to HIV/AIDS. The health care worker not only should be sympathetic in caring for the AIDS patient, be well informed about the diverse aspects of the disease and be well versed in protecting herself/himself from contracting the disease.

Many health workers are not willing to provide the necessary care and services to the HIV/AIDS infected patients due to improper knowledge and lack of attitude. So It is necessary that health care workers should have appropriate knowledge and attitudes about HIV and AIDS because they will play a key role in prevention of spread and care of people with AIDS. It will help us in formulating strategy for prevention, treatment and improving compliance to treatment of HIV/AIDS by understanding about the knowledge, attitude and practices about HIV/AIDS care givers (including patient attendant and medical staff) and in general populations.

Legislation for HIV/AIDS (prevention and control) bill 2014

A long-awaited legislation was introduced in the Rajya Sabha on 11-2-2014 in the way to end stigma and discrimination against HIV positive persons at workplace, hospitals and society with ensuring their privacy.

Objective

This study is conducted to explore the -

1. Attitude and knowledge of the B.Sc. Nursing Students towards the HIV positive patients and preventive measures,
2. Identify the needs of training to B.Sc. Nursing Students with respect to HIV/AIDS,
3. And attitude of the B.Sc. Nursing Students towards HIV/AIDS patients could affect the quality of care provision.

METHODS

A cross sectional study was conducted at Geetanjali College of Nursing, Udaipur from June 2014 to August 2014 on a pretested, precoded and prestructured self-administered questionnaire included sections on knowledge, attitude, and practice toward HIV/AIDS after having oral/ written consent. 100 B.Sc. Nursing Students were selected randomly and those who consented to participate for the study up to the desired sample size.

RESULTS

There were 58 males and 42 females participated as study subjects in this study (Figure 1).

Figure 1: Distribution of study subjects with their gender (n=100).

The maximum study subjects were observed belonged to age group of 17–30 years among males and females belonged to age group of 16 – 26 years of age. Majority of the study subjects 99.0% had heard about the HIV, while 86.0% knew that HIV is a communicable disease. 64.0% knew that HIV is a viral disease while 39.0% told...
that HIV can be prevented with vaccine. 63 percent knew that it is essential to do HIV test during pregnancy (Table 1).

Table 1: Distribution of study subjects with the knowledge (n=100).

| Variable                              | No. (%) |
|---------------------------------------|---------|
| Heard about HIV                       | 99 (99.0) |
| HIV is a communicable disease          | 86 (86.0) |
| HIV is a virus                        | 64 (64.0) |
| HIV can be transmitted from mother to child | 51 (51.0) |
| HIV can be prevented with vaccine      | 39 (39.0) |
| HIV test during pregnancy is essential | 63 (63.0) |
| HIV transmitted transplacentally      | 51 (51.0) |

Table 2: Distribution of study subjects with the source of information and reasons assumed for at risk population (n=100).

| Variable                              | No. (%) |
|---------------------------------------|---------|
| *Reasons assumed for at risk population |         |
| Living alone                          | 40 (40.0) |
| Multiple sex partners                 | 97 (97.0) |
| Sexual insatisfaction with partner    | 14 (14.0) |
| Peer pressure for multiple partner    | 28 (28.0) |
| Influenced with films/magazines       | 62 (62.0) |
| **Source of information about HIV**   |         |
| Television/radio/news paper           | 35 (35.0) |
| School education                      | 05 (05.0) |
| Partner                               | 02 (02.0) |
| Friends                               | 14 (14.0) |
| Training during jobs                  | 42 (42.0) |

*multiple responses, total not additive.

Table 3: Attitude and tendency of study subjects for health care of HIV positive cases (n=100).

| *Statements                                      | Yes | No. (%) |
|--------------------------------------------------|-----|---------|
| Work with the HIV positive nursing staff         | 68  | (68.0)  |
| Like to serve the HIV patient                    | 61  | (61.0)  |
| HIV positive staff is allowed to do nursing care | 58  | (58.0)  |
| Need of confidentiality of the HIV positive patient | 86  | (86.0)  |
| Will you visit HIV treatment centre, If you accidentally come in contact with HIV patient | 92  | (92.0)  |
| Easy condom availability                         | 89  | (89.0)  |
| Sex education in the schools                     | 67  | (67.0)  |
| Hesitate to discuss HIV issue with colleagues    | 55  | (55.0)  |

*multiple responses, total not additive.

Majority of study subjects 97 (97.0%) assumed that multiple sex partners were the main reason for at risk population followed by influence with films / magazines 62 (62.0%). Majority of them knew about the HIV from trainings during jobs 42 (42.0%) followed by media 35 (35.0%) (Table 2).

In this Study, 68 (68.0%) of the study subjects had no objection in doing the work with HIV positive HCW. Even though 61 (61.0%) of them were willing to serve the HIV patient and 86 (86.0%) were positive for need to confidentiality of HIV positive patient. 89% of study subjects had the positive attitude for easy condom availability, while 67% of subjects were agreed that there should be sex education in the schools. 55% were hesitate to discuss the HIV issue among the colleagues (Table 3).

DISCUSSION

The HIV/AIDS is acquired when virus to enters the body due to high risk behaviour of people. The major issues exists at individual, family and societal level are social stigma and discrimination related to HIV/AIDS which exaggerate the HIV/AIDS epidemic. Poor information and misconceptions and widespread ignorance play a key role in HIV/AIDS epidemic. Prevention is always better than cure, and even there is no vaccine for HIV till yet, although researches are continue for vaccine of this dread disease till date, prevention remains the only measure to apprehend the transmission of disease. There is still no vaccine for HIV as it is highly mutable and its isolates are highly variable as well as the epitopes of this viral envelope is more variable than of many other viruses. Like as polio vaccine, most effective vaccines are whole-killed or live-attenuated organisms but killed HIV-1 does not retain antigenicity and on the other side, use of a live retrovirus vaccine raises safety issues. In our study there are 61.0% workers who assumed that HIV is not protected by vaccine. Similar results are there in a similar study done in Gujarat. This can lead to the inaccurate information with regard to HIV/AIDS in the community.

Sexual insatisfaction, loneliness, multiple sex partners and influence with media films, magazines are seemed to play a major role in spread of HIV. In this study majority of our subjects were assumed that multiple sex partners is the main reason for HIV.

In India sex education is not very common in the schools previously but presently awareness about sex education is coming to be an important part of school education. Media campaigns and training is also playing a major role in HIV education.

In our study 68.0% were agree to work with HIV positive staff and 61.0% would like to serve the HIV positive patients while 39.0% were refused. Adelika observed that about one-third of the nurses would hesitate to serve patients with HIV/AIDS, while half of them refused to provide midwifery services to HIV/AIDS infected...
women comparatively. This is consistent with the study done in UAE by Haroun et al, where 59% of the students responded that the university should treat HIV infected personnel or students.

It is important to know the status of HIV in pregnant mothers because the knowledge of HIV status could contribute to the prevention of mother-to-child transmission. Although thousands of children were born HIV positive, the percentage of HIV positive births fell constantly from 2002 to 2010. This also indicated the positive effect of more HIV/AIDS health sites in India. In our study 63.0% of study subjects knew that it is essential to have HIV test during pregnancy. These results are consistent with the Belle et al.

CONCLUSION

With the above findings it has to be state that there are gaps in the knowledge of health care workers about HIV infection. Before implementing voluntary counselling and testing in antenatal care, additional HIV/AIDS training for health staff seems necessary. There is also a need of reconstruction in nursing curriculum programme to ensure that the nursing students have to gain the necessary accurate knowledge and appropriate attitudes with the practices about HIV and AIDS.

Recommendation

It is necessary to promote/advertise youth-friendly medical services among people in order to inform and assist the young people at the subject of HIV/AIDS. To improve inter-sector cooperation between health educations, public administrations and social protection sectors for a better identification of vulnerable and at risk adolescents. It is necessary to make a common effort from the family, educational institutions, health institutions and mass-media regarding HIV/AIDS.

Student nurses will have received some information about HIV and AIDS before commencing their undergraduate studies through school education. Student nurses should acquire knowledge that will change their attitudes and influence their behaviours both in the prevention of transmission of the virus during their nursing education and clinical training as well as positive attitudes for effective caring for these patients.

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REFERENCES

1. Steve "HIV scars India". USA Today, 2005.
2. Goel NK. An explorative KABP study on AIDS among nursing professionals. Indian J Prev Soc Med. 1999;30:79-83.
3. Foreman M, Lyra P, Brenibauer C. Understanding and responding to HIV/AIDS-related stigma and stigma and discrimination in the health care sector. Washington, D.C.: Pan American Health Organization [PAHO]; 2003: 56
4. Henry KC, Campbell S, Willenbring, K. A cross-sectional analysis of variables impacting on AIDS related knowledge, attitudes and behaviors among employees of a Minnesota teaching hospital. AIDS Educ Prev. 1990;2:36-47.
5. Passannante MR, French J, Louria DB. How much do health care providers know about AIDS? Am J Prey Med. 1993,9:6-14.
6. Deccan Herald. Available at: http://www.deccanherald.com/content/385858/hiv-aids-bill-tabled-rajya-sabha.html
7. Zee news. Available at: http://zeenews.india.com/news/health/health-news/bill-to-end-hiv/aids-discrimination-introduced-in-rajya-sabha_26637.html
8. Katira JM, Dutt D, Tolia PB, Chatterjee P. Impact of Training, on Perceptions and Practices Related to Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome, on Male Health Workers in Rajkot District, Gujarat. Indian Journal of Community Med. 2007;32(2):128-30.
9. Adelikan ML. A study on KAP of health care provider in Nigeria. AIDS Care. 1995;7:63-72.
10. Haroun D, El Saleh O, Wood L, Mechli R, Al Marzouqi N, Anouti S. Assessing Knowledge of, and Attitudes to, HIV/AIDS among University Students in the United Arab Emirates. PLoS One. 2016;11:e0149920.
11. Belle JA, Ferriera SB, Jordaan A. Attitude of Lesotho health care workers towards HIV/AIDS and impact of HIV/AIDS on the population structure: Afr Health Sci. 2013;13(4):1117–25.

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