

ORIGINAL ARTICLE

## Knowledge and Awareness about HIV/AIDS among Nursing Staff of a Tribal District Hospital of South India

Rajhans K Nagarkar<sup>1</sup>, Mohammed Shakeel Mohammed Bashir<sup>2</sup>, Ajay Khade<sup>3</sup>, Madhurya R<sup>4</sup>, Sheethal A<sup>5</sup>, Shyam Sunder<sup>6</sup>, Mohd Saleem<sup>7</sup>

Assistant Professor<sup>1</sup>, Associate Professor<sup>2</sup>, Professor<sup>3</sup>, MBBS Student<sup>4,5,6</sup>, RIMS Adilabad, Lecturer NKPSIMS<sup>7</sup>

<http://dx.doi.org/10.18049/jcmad/118>

### Abstract

**Background:** Nursing staff play very important role in looking after the diagnostic needs, therapeutic help and psychological support of the HIV/AIDS patients. So it is very important that the nursing staff should have complete awareness about HIV infection. The present study was conducted to assess the level of correct knowledge and awareness amongst the nursing staff of the tribal district about HIV/AIDS and attitudes towards the care of such cases. **Materials and Methods:** A total of 94 nurses included in the study and a pre-designed, pre-tested and self-administered questionnaire which contains questions regarding knowledge and awareness about HIV infection/AIDS and attitude towards care of such patients was given to them. **Result:** Most of the nursing staff has some kind of awareness about HIV infection. But there are few misconceptions regarding HIV/AIDS. Majority of the nurses 89 (94.69%) are interested for further education and training about HIV/AIDS. 21 (22.34%) nurses want a right to refuse to care for HIV/AIDS patients but 62 (65.96%) feel proud to provide nursing care to such patients. **Conclusion:** We suggest that regular and repeated training programs are needed to correct few wrong concepts of nursing staff. Such programs will be highly effective since the nurses are already motivated for such types of program.

**Keywords:** AIDS, HIV infection, Nursing staff

### Address for correspondence:

Dr. Rajhans Kishanrao Nagarkar, Assistant Professor of Microbiology, Rajiv Gandhi Institute of Medical Sciences Adilabad 504001. [rajhansn@gmail.com](mailto:rajhansn@gmail.com), Mob: 9603468444

### Introduction

In this century human immunodeficiency virus (HIV) infection is a global burden with serious health and socioeconomic problem specifically in developing countries especially in India. According to WHO there are approximately 33.3 million people are infected with this deadly virus including the syndrome “Acquired immunodeficiency syndrome (AIDS)”. About 90% of HIV infected cases belongs to developing countries in which share of Indians is around 2.31 million.<sup>1</sup> In India, around 89% of diagnosed HIV cases are seen in the age group of 15-44 years which is a sexually active and economically productive age group indicating the severe socioeconomic problem.<sup>2</sup>

Thus HIV infection is a challenge not only for medical staff but also for paramedical health workers and making additional demands from health care providers and testing the competence of health workers. Nurses are the very important component among paramedical staff as they are the one who are responsible for constant care of patients in the health care delivery system.<sup>3</sup> The nurses play very important and major role in looking after the diagnostic needs, therapeutic help and psychological support of the patients.<sup>4</sup> So it is the very important fact that the nursing staff should have complete awareness about every aspect HIV infection and AIDS. It will not only reduce the occupational exposure but also will help in management of the condition. Rajiv Gandhi Institute of Medical Sciences (RIMS) Adilabad is a teaching hospital of Andhra Pradesh, India. It is a tribal cum rural district with majority of population living in rural

areas.<sup>5</sup> Staff nurses posted in RIMS Adilabad are either from the same district or from the nearby and from surrounding districts. The present study was conducted to assess the level of correct knowledge and awareness amongst the nursing staff of this tribal district about HIV/AIDS and attitudes towards the care of such cases.

## Materials and Methods

Out of almost 250 nursing staff members of Rajiv Gandhi Institute of Medical Sciences (RIMS) Adilabad, a total of 96 nurses were selected including one male nurse. Oral informed consents were obtained from all the nurses after explaining the nature, purpose and benefits of the study. Permission for the study was granted by the institutional authorities. A pre-designed, pre-tested and self-administered questionnaire which contains questions regarding knowledge and awareness about HIV infection/AIDS and attitude towards care of such patients was given to the nurses. Identity of each individual and their score was kept confidential and not share with each other or anyone else.

## Results

A total of 94 nurses participated in the study including one male nurse. Out of 94 nurses 10 (10.64%) were head nurse while cadre of 84 (89.35%) was staff nurse. As far as their qualification is concerned one was (1.06%) MSc. Nursing, 24 (25.53%) BSc. Nursing, 46 (48.93%) GNM (General Nursing Midwife), 16 (17.02%) Intermediate while 7 nurses not mentioned their qualification. 43 (45.74%) nurses worked in urban region, 10 (10.64%) in rural region, 5 (5.32%) in tribal region of this tribal district while 36 (38.30%) nurses not mentioned their regional experience.

All the nurses were heard about HIV and AIDS including 7 (7.45%) who orally told about their awareness and except one (1.06%) who was unaware about it. Main source of information 65 (69.15%) about HIV/AIDS was training (education) they received during their academic years while influence of mass media 17

(18.09%), peer group 7 (7.45%) and government authorities 4 (18.09%) was also seen. 20 (21.28%) nurses not mentioned their source of information. 90 (95.74%) nurses knows that HIV is virus but 7 (7.45%) thinks that it is a fungus. 92 (97.87%) nurses know full form of HIV and AIDS.

Mode of transmission was correctly cited by 87 (92.55%) nurses (Table-1). 89 (94.68%) were aware that it can be transmitted by infected needles and 77 (81.91%) were sure that it is not transmitted by kissing. 45 (47.87%) indicated that they can identify cases by their physical appearance. Most of the nurses 89 (94.69%) are interested for further education and training about HIV/AIDS and 74 (78.72%) already received training about handling the cases. 19 (20.21%) were not exposed to HIV patient previously. 9 (9.57%) were not shown interest for caring such patients in future, even 32 (34.04%) want to get transfer if forced to take care of HIV cases. 56 (59.57%) thinks they will not receive any service promotions even after serving HIV/AIDS. 21 (22.34%) want a right to refuse to care for HIV/AIDS patients. 62 (65.96%) feel proud to provide nursing care to HIV/AIDS patients (Table- 1).

**Table- 1: Type & Transmission**

Mode of Transmission	Number	%
Sexual activity	04	04.26
Blood	01	01.06
Mother to foetus	00	00.00
By all three	87	92.55
Not mentioned	03	03.19
<b>Reaction while caring of HIV/AIDS patients</b>		
Proud	62	65.96
Stress	10	10.60
Anxiety	35	73.23
Hesitation	3	3.19
Not mentioned	3	3.19

After accidental needle injury most of them 62 (65.96%) responded that they will use soap and water (Table- 2). As far as needle destruction is concerned, 86 (91.49%) mentioned needle destroyer as a ideal method to dispose needles and syringes while 7 (7.455%) cited recapping

of needle is sufficient. 55 (58.51%) respondent mentioned ELISA as initial diagnostic test and 65 (69.19%) think that management should be started 24 hours of accidental exposure. 77 (81.91%) know full form of ART. 85 (90.43%) think use of condoms can prevent HIV transmission. 86 (91.42%) mentioned that immunity decreases in HIV infection and most common opportunistic infection in HIV cases is Tuberculosis 51 (54.26%).

**Table- 2: After accidental needle injury**

What you will do?	Number	%
Encourage bleeding	42	44.68
Apply bandage	11	11.70
Soap and water & disinfectants	62	65.96
Don't know	4	4.26
Not mentioned	4	4.26

## Discussion

HIV/AIDS is a significant health as well as socioeconomic problem of 21<sup>st</sup> century in many regions of the globe specifically of developing countries.<sup>6</sup> Our results show that most of the nursing staff of the region has fair idea about HIV infection but their knowledge and attitudes towards the condition is still need improvements. Most of the respondent in our study have basic information about HIV, its mode of transmission, post exposure management, diagnosis and complications. They feel proud in providing nursing care to HIV patients. But the nursing staff has lot of stress to provide nursing care to the HIV cases as fear of becoming infected is more prevalent in them.

Goel NK et al<sup>7</sup> in Dehradun region of India also found similar results as the nursing staff of that region have the basic information about HIV like causative agent, modes of transmission. But there are lots of misconceptions about the disease amongst the nursing staff. They opined that the deficiencies in knowledge influence the behavior and exposes them to the risk of transmission. Moreover, misconceptions regarding transmission of the disease can lead to discrimination in providing nursing care to these patients.

Kumar et al<sup>8</sup> in 1996 at Delhi region found that majority of nursing students were aware of various aspects of HIV/AIDS. But misconceptions regarding HIV transmission were widely prevalent amongst them. They concluded that one training session on AIDS is not sufficient, it cannot bring any changes but regular training sessions are needed from the inception of their education program. Dobe M et al<sup>9</sup> commented in 1995 about the findings of a study which was conducted in West Bengal that around 50% to 60% paramedical staff of the medical college had misconceptions about HIV/AIDS, particularly about utensils, sharing toilets, and bites of mosquitoes and bedbugs. He opined that the relatively low knowledge about HIV/AIDS in 1995 might be due to lack of seriousness from the public health authorities who do not promote HIV/AIDS education. Datta C and Bandopadhyay D<sup>10</sup> at Kolkata in 1997 found that all the 75 senior nurses had a satisfactory level of knowledge but significant level of misconceptions regarding disinfection and precautionary measures were present amongst them and even 24% were unwilling to provide care for HIV-infected patients. They suggested that continuous in-service training is needed to dispel the misconceptions.

Majority of nursing staff want to get trained themselves for management of HIV/AIDS cases and have keen interest in upgrading their knowledge about the disease. Their misconceptions and lack of awareness are probably due to tribal nature of the region as the district is tribal and majority of the population is living in rural areas. Most of the nurses are from the same district or surrounding districts and get trained in the region itself.

## Conclusion

Majority of nursing staff have awareness regarding HIV/AIDS but few misconceptions also exist amongst them which are required to be corrected. We suggest that regular and repeated training programs are needed to correct few wrong concepts of nursing staff. Such programs will be highly effective since the nurses are already motivated for such types of program and they also feel proud about caring the HIV/AIDS patients.

## Acknowledgement

We present our sincere thanx to all those nursing staff members who were part of this study.

---

*Source(s) of support: Nil*

*Conflict of Interest: None declared*

---

## References

1. AIDS Epidemic Update. WHO/UNAIDS, December 2010{accessed on December 12, 2011}. Available from: <http://www.unaids.org/en/HIV-data>.
2. Joge US, Deo DS, Lakde RN, Choudhari SG, Malkar VR, Ughade HH. Sociodemographic and clinical profile of HIV/AIDS patients visiting to ART Centre at a rural tertiary care hospital in Maharashtra state of India. *Int J Biol Med Res* 2012;3(2):1568-1572.
3. Goel NK, Bansal R, Pathak R, Sharma HK, Aggarwal M, Luthra SC. Knowledge and awareness of nursing students about HIV/AIDS. *Health and Population: Perspectives* 2010;33(1):55-60.
4. Bhat G, Patnaik B, Pratinidhi A, Gupte A, Desai A. Knowledge and awareness amongst the nursing students regarding risk of HIV infection through accidental needlestick injury. *Indian Journal of Community Medicine* 2004;29(3):143-144.
5. National informatics centre Adilabad, Official website of Adilabad collectorate.mht, {accessed on June 28, 2012}. Available from: <http://www.adilabad.ap.gov.in>
6. Kumar A, Lal P, Ingle GK, Gulati N. AIDS-related apprehensions among nursing students of Delhi. *J Comm Dis* 1999;31(4):217-21.
7. Goel NK, Bansal R, Pathak R, Sharma HK, Aggarwal M, Luthra SC. Knowledge and awareness of nursing students about HIV/AIDS. *Health and Population: Perspectives* 2010;33(1):55-60.
8. Kumar A, Lal P, Walia M, Arora R, Gulati N. AIDS awareness among nursing students of Delhi. *J Comm Dis* 1996;28(1):20-27.
9. Dobe M. Awareness on AIDS among health care professionals. *Indian Public Health* 1995; 39(3):105-108.
10. Datta C, Bandopadhyay D. Knowledge and attitude in relation to HIV/AIDS among in-service nurses of Calcutta. *J Indian Med Association* 1997;95(3):75-77.