

Knowledge among Nurses towards HIV/Aids in Tertiary Care Hospital, Nagpur

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Research Article

Abstract: Purpose: The present descriptive cross sectional study was conducted with an objective to assess knowledge of nurses in tertiary care hospital in Nagpur towards HIV/AIDS. **Methodology:** Data was collected using pre-designed, pre-tested anonymous, self administered questionnaire which were distributed amongst nurses who work in hospital in time period of study. **Results:** 36.5% of Nurses were found to have a high level of knowledge regarding HIV. 29.5% were found to have adequate knowledge regarding HIV. In 26% study subjects, knowledge level was low and in 8% study subjects it was found to be very low. All of the study subjects were aware of HIV/ AIDS being a sexually transmitted disease. **Conclusion:** The result indicates that nursing staff at tertiary care hospital have inadequate knowledge about HIV/AIDS.

Keywords: Public health, Nurses, HIV/AIDS, Awareness, Knowledge.

Introduction

Patients infected with HIV access to Hospital with an aim to receive proper treatment and care. Nursing staff in a hospital plays an important role in providing treatment and care to these HIV patients. The duties of Nurses include collecting body samples such as blood samples, sputum samples, urine samples, stool samples, other body fluids, cleaning and changing beds along with administering intravenous, intramuscular and oral medications. Ineffective sterilization technique, inappropriate disposal of used syringes, needles, poor sanitation and use of inadequate precautions while nursing HIV patients increases the hazards of getting HIV infected. The transmission rate of HIV per exposure is less than 0.5% and contributes to 0.01% of global infections. It has widely been observed that people infected with HIV frequently encounter discrimination while seeking and receiving health care services. The lack of universal adherence to infection control protocols such as Injection safety possess a great risk for nurses of occupational HIV infection at virtually every level of their daily work. Due to the risk of getting infected while handling and nursing HIV patients, Nurses frequently discriminate and avoid treating HIV patients. The lack of vaccine or cure for HIV/ Aids makes information, education, training and communication the only measure to prevent infection. It is essential for nurses to have proper updated knowledge about HIV transmission,

prevention and treatment so as to maintain quality of care while encountering clinical exposure to increasing HIV patients in hospitals. It has become very important to effectively tackle the stigma attached to this disease amongst nursing staff. Better knowledge and awareness of nursing staff is expected to improve the anxiety about treating HIV patients and also improve patient compliance with standard treatment to patients. Knowledge about basic infection control measures can reduce the risk of HIV associated health care infections in Nurses. Considering these factors and with an aim to improve the quality of health care services provided by Nurses, study of knowledge of nurses regarding HIV was conducted in tertiary care hospital in Nagpur.

Aims and Objectives

1. To assess the knowledge of nurses in a tertiary care hospital regarding HIV/ AIDS

Methodology

A descriptive cross sectional study was conducted over a period of four months at tertiary care hospital in Nagpur amongst nursing staff of the Hospital. Study was carried out from 15 June 2013 to 15 October 2013. Nurses working in General Medicine, Obstetrics and Gynecology, Surgery, Pulmonary Medicine and Casualty were included. Nurses working in the hospital at the time of study were included in the study. Those nurses who were not willing to participate in the study were excluded from the study. A written informed consent was obtained from the Nurses after properly explaining them about objectives of the study. The data was collected by using a pretested, validated, self administered questionnaire which were distributed amongst the Nurses who work in the time period of the study. The questionnaire was pilot tested among 4 senior Nursing staff members with respect to its clarity, comprehensibility and cultural appropriateness to this institutional setup. The questionnaire was divided into 3 main sections and the information required was collected under following categories:

- 1) Demographic variables of Nursing staff in the Hospital
- 2) Knowledge about HIV with special consideration given to its spread, mode of transmission, safety measures and universal precautions to be used and post exposure prophylaxis
- 3) Awareness of Nurses towards HIV

Results

Out of 210 study subjects who were selected, 200 gave consent and answered to the questionnaire. Most of the study subjects were of the age group of 20-39 yrs (61%). The mean age of the study participants was 31.6 yrs (N=200). Majority of study subjects were females (82%). Amongst the study subjects, 77% were married. The qualification of the study subjects in the study were B. Sc. Nursing (52%), Diploma Nursing(11.5%) and GNM (General Nursing and Midwifery-36.5%). 56% nurses working for ≤5 yrs, 15% nurses working for 6-10 yrs, 10.5% nurses working for 11-15 yrs and 18.5% working

for ≥16 yrs. Nursing staff in the tertiary care hospital were interviewed with a pretested questionnaire. All the study subjects were aware that HIV/Aids is a sexually transmitted disease. 88.5% of the study subjects believed that HIV is transmitted from Mother to Baby. 58.5% of the study subjects believed that HIV is transmitted through Breast feeding. 43% study subjects knew that HIV is not transmitted through Mosquito bite. 9.5% of the study subjects still believed that HIV is transmitted through mosquito bite and 47.5% had no idea about it. 66% of the study subjects were aware of the term “Post exposure prophylaxis”. 78% study subjects knew that complete cure of HIV is not possible. All the study subjects knew that HIV/ AIDS can be prevented by use of Condoms. All of them thought that universal precautions use is mandatory while handling HIV positive patients. None of them believed that HIV is transmitted by shaking hands.

Overall correct responses of nurses to HIV related knowledge questions. (Total subjects in the study: N=200)

Questions	Correct Responses
HIV/AIDS is transmitted from Mother to Baby.	177(88.5%)
HIV/AIDS is transmitted through Breast feeding	117(58.5%)
HIV/AIDS is transmitted through Mosquito Bite.	86(43%)
Do you know the term Post exposure prophylaxis?	132(66%)
HIV/AIDS transmission can be prevented by use of condom	200(100%)
HIV/AIDS can be completely cured	156(78%)
It is necessary to use universal precautions while handling HIV/AIDS patients	200(100%)
Universal precautions use is applied to HIV/AIDS patients only	186(93%)
Vaccination can be done for prevention of HIV/AIDS	144(72%)
HIV is transmitted by shaking hands	194(97%)

Question	Awareness status	Correct responses
HIV/AIDS is a sexually transmitted disease	Aware/Not aware	200(100%)

Discussion

The present cross-sectional study was carried out in tertiary care Hospital, Nagpur from June 2013 to October 2013. The purpose of the study was to study knowledge amongst nurses towards HIV/ Aids. The response rate of nurses in this study was almost 95%. Most of the study subjects were Females (82%) which indicates lesser number of male nurses in the hospital and also demands promotion of interest of males towards nursing occupation. Most of the nurses had completed B.Sc nursing (52%) and only 11.5% nurses had done diploma in nursing which indicates highly educated nursing staff in the hospital. It was observed that with an increase in experience of the nursing staff there was a increase in knowledge towards nursing HIV patients in the hospital. Most of the well experienced nurses were found to have a

comparatively better knowledge than the newly joined nurses. However it is a matter of concern that some of the study subjects had no idea about mode of transmission of HIV/Aids. Almost 34% of study subjects didn't knew the term Post exposure prophylaxis. 17% incorrectly believed that HIV/Aids can be completely cured. 2% still wrongly believed that HIV/ Aids can be prevented by vaccination. Taking into consideration that the target population of the present study was nursing staff, their knowledge on HIV/AIDS was inaccurate and insufficient for future work in health care sector. These nurses play a very important role in care and recovery of HIV/ AIDS patients and these if found having inaccurate knowledge towards HIV patients, it may adversely affect the treatment provided to patients and also the reputation of the Hospital. Such inaccurate knowledge may also lead to

increased prevalence of HIV infection among nursing staff. Surprisingly, 9.5% of the respondents believed that HIV could be spread through mosquitoes. Knowledge assessment of the study subjects was done with a pretested questionnaire containing 10 questions as mentioned above in which on the basis of the number of correct answers given, their knowledge was classified into high(8-10 correct answers), adequate(6-8 correct answers), low(3-5 correct answers) and Very low(0-2 correct answers) and the results were tabulated as follows:

Level of Knowledge	Frequency	Percentage values
High	73	36.5
Adequate	59	29.5
Low	52	26
Very Low	16	8
Total	200	100

36.5% of Nurses were found to have a high level of knowledge regarding HIV. 29.5% were found to have adequate knowledge regarding HIV. In 26% study subjects, knowledge level was low and in 8% study subjects it was found to be very low. Studies carried out illustrate similar findings with the present study and concluded that nursing staff had insufficient knowledge about HIV and AIDS.² A high level of awareness was reported by Rahul et al³ in his study. The study was also seen as an opportunity to provide lacking information and correct misconceptions about different aspects of HIV/AIDS among these study subjects.

Conclusions

The results indicate that more than half of the nursing staff at the tertiary care hospital had high and adequate knowledge about HIV/ Aids and 34% of the nursing staff had low and very low knowledge regarding HIV/Aids which is a matter of concern. So, the knowledge of nursing staff regarding HIV/Aids needs to be strengthened so as to provide proper care to patients admitted in the hospital.

Limitations of Study

The current study should be interpreted in light of some limitations. This survey used nursing staff of a private hospital in Nagpur. Therefore the results of the present study could not be generalized to other groups of nurses. Future studies could include a larger, randomized sample from a more geographically diverse nursing group which may lead to better knowledge and awareness among Nurses regarding HIV/ AIDS.

Recommendations

Education can improve the knowledge about HIV/AIDS. Training programmes for Nurses working in the hospital should be organized intermittently to ensure health

practices of nurses working in the hospital. It is very important to highlight the potential need to improve the level of knowledge among nursing staff towards HIV/AIDS as they have a key role in prevention, care and treatment in their future career as nurses. Through evaluating the knowledge towards HIV/AIDS among nursing staff, gaps can be identified as well as areas of importance for training and health care education amongst nursing staff can be promoted as well.

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