

A STUDY TO ASSESS THE KNOWLEDGE ON NOSOCOMIAL INFECTION AMONG STAFF NURSES WORKING IN ICU IN SRM GENERAL HOSPITAL, KATTANKULATHUR

A. Akila Devi*, Blessy Samson, G. Jayapriya, P. Lochana, P. Malarvizhi

Associate Professor, SRM College of Nursing, SRM Institute of Science and Technology.

*Corresponding Author: A. Akila Devi

Associate Professor, SRM College of Nursing, SRM Institute of Science and Technology.

Article Received on 14/03/2018

Article Revised on 04/04/2018

Article Accepted on 25/04/2018

ABSTRACT

Nosocomial infections (NIs), also known as a hospital-acquired infection, are defined as infections which are acquired after 48 h of patient admission. Such infections are neither present nor incubating prior to a patient's admission to a given hospital. NIs represent a universally serious health problem and a major concern for the safety of both patients and the health care providers.

KEYWORDS: Nosocomial infections (NIs), hospital-acquired infection.

INTRODUCTION

Nosocomial infections (NIs), also known as a hospital-acquired infection, are defined as infections which are acquired after 48 h of patient admission. Such infections are neither present nor incubating prior to a patient's admission to a given hospital. NIs represent a universally serious health problem and a major concern for the safety of both patients and the health care providers.^[1,2,3,4] Although the incidence rate for nosocomial infection vary from country to country, at any given time, almost seven patients from developed countries to ten patients from developing countries out of each 100 patients admitted to hospitals gain at least one kind of nosocomial infections.^[5]

Nurses are responsible for providing medications, dressing, sterilization, and disinfection. They are involved in more contact with patients than other health care workers (HCWs). Therefore, they are more exposed to various Nis.^[6,7] Hence, nurses play a vital role in transmitting NIs, and their compliance with infection control measures seems to be necessary for preventing and controlling Nis.^[8]

It has been reported that in hospitals with an effective program for nosocomial infection surveillance, infection rates can be reduced by approximately one-third.^[9]

Hospital personnel, especially the nurses play an important role in spreading the infection and they are considered as key members of managing and controlling the hospital infections; therefore, nurses must have correct, up-to-date and appropriate scientific information

regarding varieties of hospital infections, their effects on afflicting patients, death toll and increased hospital costs, recognition of people at risk and also the criteria to prevent and control.^[10] Nurses are the largest therapeutic team in hospitals.^[11,12]

Nosocomial infections are those infections that occur in the hospital/Health care facility, but secondary to patients favourable health condition. Infections are considered nosocomial if they first appear 48 hours or more after hospital admission or within 30 days after discharge.

Nurses are responsible for providing medications, dressing, sterilization and disinfection. Nurses are involved in more contact with patient than other health care providers. Hence, patients are exposed to various nosocomial infections. Nurses infection control measures seems to be necessary for preventing and controlling nosocomial infections. Nurses need to be aware and knowledgeable about themselves to prevent transmission of nosocomial infections.

OBJECTIVES

- To assess the level of knowledge on nosocomial infection among staff nurses working in ICU.
- To associate the level of knowledge on nosocomial infection among staff nurses working in ICU with their selected demographic variables.

MATERIALS AND METHODS

A descriptive study was conducted to assess the knowledge on nosocomial infection among staff nurses working in ICU. The study was conducted in a selected Hospital. Study participants included were staff nurses working in the ICU. A total of 30 staff nurses participated in the study. Structured questionnaire was predesigned to assess the knowledge among staff nurses in ICU.

The score was interpreted as follows

Level of knowledge	Percentage
Inadequate knowledge	≤50%
Adequate knowledge	>50%

Table 1: represents the frequency and percentage distribution of demographic variables of staff Nurses in ICU.

Demographic variables	Frequency	Percentage
Age in years		
20-25	25	83.3
26-30	5	16.7
Gender		
Male	3	10
Female	27	90
Professional Qualification		
B.sc (N)	14	46.7
DGNM	16	53.3
Experience in Years		
1-3	23	76.7
4-6	5	16.7
7-9	1	3.3
>9yrs	1	3.3

RESULTS

Most of the subjects (83.3%) were in the age group of 20-25 years and minimum numbers of subjects (16.7%) were found in the age group of 26-30 years. Most of the subjects 90% were female and 10% were male. With regard to professional qualification most of the subjects (53.3%) were DGNM (46.7%) were B.Sc (N). Most of the subjects (76.7%) had 1-3 years' experience, (16.7%) had 4-6 years of experience 3.3% had 7-9 years experiences and 3.3% had more than 9 years' experience

The first objective was to assess the knowledge on infection control among staff nurses in ICU. The frequency and percentage distribution on level of knowledge on Nasocomial infection control among staff nurses reveals that 14(46.7%) had inadequate knowledge and 16(53.3%) of staff nurses had adequate knowledge.

Level of knowledge	Frequency	Percentage
Inadequate knowledge	14	46.7
Adequate knowledge	16	53.3

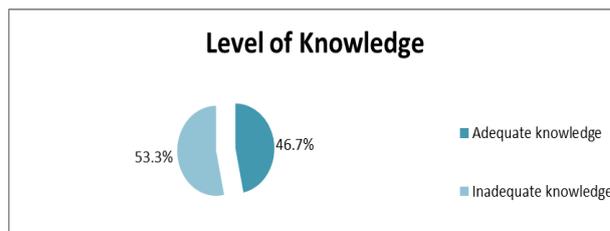


Fig. 1: Shows that 14(46.7%) had were inadequate knowledge, 16(53.3%) of staff nurses had adequate knowledge.

The second objective was to associate the level of knowledge on nosocomial infection among staff nurses working in ICU their selected demographic variables. Nothing showed significant value with their selected demographic variables.

DISCUSSION

The study showed that only 14(46.7%) had inadequate knowledge, 16(53.3%) of staff nurses had adequate knowledge. The implication drawn from the study are of vital concern to all health care team members and need to be incorporated in both theory and practice. Factors such as increased workload, lack of staff in the ICU, less supervision also have a major impact on the knowledge and practice of infection control.

CONCLUSION

The following recommendation needs to be implemented in the hospital (i) strict implementation of hand washing techniques rules is the need of the hour, supervision of hand washing programme in the hospital and its documentation, (ii) conducting the orientation programme for the new staff nurses and (iii) organizing continuous awareness programme among the staff nurses s. This will promote knowledge of infection control among staff nurses and decrease the rate of nosocomial infection among patients.

REFERENCES

- Iliyasu G, Dayyab FM, Habib ZG, Tihamiyu AB, Abubakar S, Mijinyawa MS, et al. Knowledge and practices of infection control among healthcare workers in a tertiary referral center in North-Western Nigeria. *Ann Afr Med.*, 2016; 15(1): 34.
- Kamunge EW. Exploring knowledge, attitudes and practices of registered nurses regarding the spread of nosocomial infections, in health and medical sciences. 2013, Seton Hall University Dissertations and Theses (ETDs). New Jersey, 1865.
- WHO. WHO guidelines on hand hygiene in health care. Geneva: WHO, 2010; 978(92), 4.
- Allegranzi B, et al. Report on the burden of endemic health care-associated infection worldwide. Geneva: World Health Organization, 2011.
- WHO, Health care-associated infections fact sheet. World Health Organization, 2014.

6. Shinde MB, Mohite VR. A study to assess knowledge, attitude and practices of five moments of hand hygiene among nursing staff and students at a tertiary care hospital at Karad. *Int J Sci Res.*, 2014; 3(2): 311–21.
7. Sarani H, Balouchi A, Masinaeinezhad N, Ebrahimitabs E. Knowledge, attitude and practice of nurses about standard precautions for hospital-acquired infection in teaching hospitals affiliated to Zabol University of Medical Sciences (2014). *Glob J Health Sci.*, 2016; 8(3): 193.
8. Haley RW, Culver DH, White JW, Morgan WM, Emori TG, Munn VP, et al. The efficacy of infection surveillance and control programs in preventing nosocomial infections in US hospitals. *Am J Epidemiol*, 1985; 121: 182–205.
9. Cheraghi MA, Nejad EM, Begjani J, Rabirad N, Ehsani SR, Kaji MA. Knowledge and Attitudes of Nurses Regarding HIV/AIDS (Tehran–2010). *Iran J Clin Infect Dis.*, 2011; 6(3).
10. Ehsani SR, Cheraghi MA, Nejati A, Salari A, Esmailpoor AH, Nejad EM. Medication errors of nurses in the emergency department. *J Med Ethics Hist Med.*, 2013; 6: 11.
11. Mohammad Nejad E, Jafari S, Mahmoodi M, Begjani J, Roghayyeh Ehsani S, Rabirad N. Hepatitis B virus antibody levels in high-risk health care workers. *Hepat Mon.*, 2011; 11(8): 662-3.