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Assess the Level of Knowledge on Prevention of Nosocomial Infection Among Healthcare Workers at Kannur Medical College, Anjarakandy

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Abstract

The study assessed the level of knowledge on prevention of nosocomial infection among 50 health care workers at Kannur Medical College, Anjarakandy, selected through non-probability convenience sampling. Data were collected using a structured knowledge questionnaire. Data were analysed by using descriptive and inferential statistics. The findings of the study prove that majority 30(60%) healthcare workers had moderate knowledge, 16(32%) had adequate knowledge, and 3(6%) had inadequate knowledge. The mean knowledge score was 16.16 (SD = 4.94). The significant association was found between level of knowledge and their selected variables such as qualification (x2=10.87) and training on infection prevention (x2=7.51) at P<0.05 level of significant.

Keywords: Assess, knowledge, prevention of nosocomial infection, healthcare workers.

INTRODUCTION

A Nosocomial infection- also called “hospital acquired infection” can be defined as: An infection acquired in hospital by a patient who was admitted for a reason other than that infection. Hospital associated infections or nosocomial infections are those infections acquired during the patient’s stay in hospital. They form a major worldwide public health problem despite advances in our understanding and control of these infections. The best clinical area in the world can be worthless if patients pick up other infections while they are in hospitals. Nosocomial infections are one of the major complications for the healthcare professionals to tackle. It is a major source of morbidity and mortality and is a monetary burden on patients. Nosocomial infection occurs worldwide and affects both developed and resource-poor countries. Infection acquired in healthcare setting is among the major causes of death and increased morbidity among hospitalized patients.

They are a significant burden both for the patient and for public health. A prevalence survey conducted under the WHO in 55 hospitals of 14 countries representing 4 WHO Regions (Europe Eastern Mediterranean, South-East Asia and Western Pacific) showed an average of 8.7 % of hospital patients had Nosocomial infection.

STATEMENT

A descriptive study to assess the level of knowledge on prevention of nosocomial infection among healthcare workers at Kannur Medical College Anjarakandy.

OBJECTIVES

1. To assess the level of knowledge on prevention of nosocomial infection among healthcare workers at Kannur Medical College Anjarakandy.

2. To find out the association between the level of knowledge on prevention of nosocomial infection and their selected demographic variables.

HYPOTHESIS

H1 There will be significant relationship between the level of knowledge on prevention of nosocomial infection and their selected demographic variables.

METHODOLOGY

A descriptive research design was used to assess the knowledge on prevention of nosocomial infection among health care workers at Kannur Medical College, Anjarakandy. The study was conducted among 50 health care workers at Kannur Medical College, Anjarakandy by using non-probability convenience sampling technique. The tool used for this study was structured knowledge questionnaire consisting of selected variables and 26 multiple choice questions to collect the information regarding the knowledge on prevention of nosocomial infection among health care workers. Data was collected from 12/9/2023 to 15/9/2023 through printed form and analyzed by using descriptive and inferential statistics

RESULTS AND DISCUSSION

Table 1: Frequency and percentage distribution of samples according to their demographic variables

N=50

Sl	Sc variables	Frequency	Percentage %
	Age years in		
	a)<20-25 years	30	60%
	b)25-30years	9	18%
	c)30-35years	5	10%
	d)>35years	6	12%
	Gender		
	a)Female	44	88%
	a)Male	6	12%
3	Qualification		
	a)Diploma	10	20%

	b)Graduate	38	76%
	c)Postgraduate	2	4%
4	Work experience		
	a)<5years	36	72%
	b)5-10years	9	18%
	c)>10years	5	10%
5	Income		
	a) <10,000	12	24%
	b) 10,000-20,000	24	48%
	c) 20,000-30,000	8	16%
	d) >30,000	6	12%
6	Designation of healthcare worker		
	a)Doctor	2	4%
	b)Nurse	38	76%
	c)Technicians	10	20%
7	Training on infection prevention		
	a)Yes	37	74%
	b)No	13	26%

Table 2: LEVEL OF KNOWLEDGE REGARDING PREVENTION OF NOSOCOMIAL INFECTION

N=50

Level of knowledge	Score	Frequency	Percentage
Inadequate	0-8	3	6%
Moderate	9-17	30	60%
Adequate	18-26	16	32%

Table 2 shows that the majority of the healthcare workers, 30 (60%), had moderate knowledge regarding prevention of nosocomial infection. About 16 (32%) healthcare workers had adequate knowledge, whereas only 3 (6%) had inadequate knowledge. These findings indicate that most of the participants possessed a moderate level of knowledge on prevention of nosocomial infections.

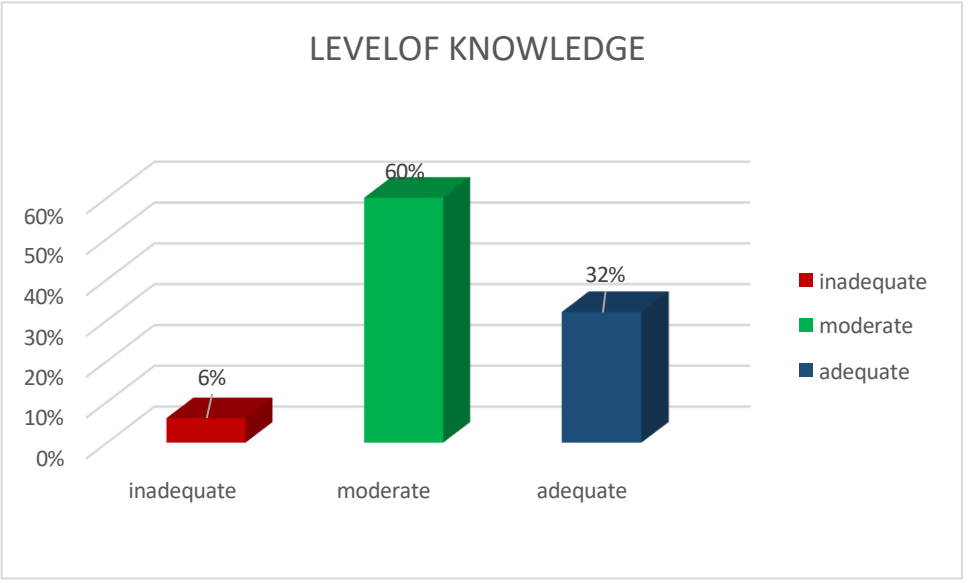

Figure 1 shows that most of the samples 60% have moderate knowledge, 32% have adequate knowledge and 6% have inadequate knowledge.

Table 3: Association between level of knowledge and their selected demographic variables

N=50

Sl No	Demographic variables	χ2value	Df	Table value	P value	Inference
1	Agein years a) <20-25years b) 25-30years c) 30-35years d) >35years	6.74	6	12.59	p>0.05	Not significant
2	Gender a) Female b) male	6.29	4	9.49	p>0.05	Not significant
3	Qualification a) Diploma b) Graduate c) Postgraduate	10.87	4	9.49	P<0.05	Significant
4	Work experience a) <5years b) 5-10years c) >10years	6.26	4	9.49	p>0.05	Not significant

5	Income a) <10000 b) 10000-20000 c) 20000-30000 d) >30000	3.55	4	9.49	p>0.05	Not significant
6	Designation of healthcare worker a) Doctor b) Nurse c) Technicians	2.48	4	9.49	p>0.05	Not significant
7	Training on infection prevention a) Yes b) No	7.51	2	5.99	P<0.05	significant

Table 3 depicts the association between selected demographic variables and the level of knowledge regarding prevention of nosocomial infection among healthcare workers at Kannur Medical College. The findings revealed that there was no statistically significant association between knowledge level and demographic variables such as age, gender, work experience, income, and designation of healthcare worker, since the obtained p-value was greater than 0.05. In contrast, educational qualification and training on infection prevention showed a statistically significant association with the level of knowledge, as the obtained p-value was less than 0.05. These findings indicate that higher educational status and prior training on infection prevention contribute significantly to better knowledge among healthcare workers regarding prevention of nosocomial infections.

DISCUSSION

A non-experimental descriptive study was conducted to assess the level of knowledge regarding the prevention of nosocomial infection among healthcare workers at Kannur Medical College. Nosocomial infections remain a major concern in healthcare settings, making adequate knowledge of infection prevention practices essential among healthcare professionals.

The study findings revealed that the majority of healthcare workers, 30 (60%), possessed moderate knowledge regarding the prevention of nosocomial infections. In addition, 16 (32%) healthcare workers demonstrated adequate knowledge, while 3 (6%) had inadequate knowledge. These findings indicate that although most participants were aware of infection prevention measures, there is still a need for improvement in knowledge and awareness among healthcare workers.

The study emphasizes the importance of continuous education, training programs, and strict adherence to infection control protocols to reduce hospital-acquired infections and improve patient safety.

IMPLICATIONS OF THE STUDY

NURSING PRACTICE

Nurses play a vital role at imparting health services in all levels of preventive, promotive, curative and rehabilitative aspects care that the nurses stay updated on best practices and evidence-based interventions.

Nurses can utilize this standardized protocol for patient safety and better clinical outcome.

NURSING EDUCATION

Continuingeducationregardingtheprevention onnosocomialinfectionisthewaytoupdatein knowledge of healthcare workers. Ensuring that healthcare workers are adhere to the latest infection prevention guidelines and recommendations from relevant health authorities. Traininghealthcareworkersininfectionsurveillancetechniquestoidentifypotentialoutbreaks early and implement preventive measures.

NURSING RESEARCH

The nursing profession is increasingly in the development of scientific knowledge relating to it's practice. Research becoming an important force in nursing and is being used to change practice, education and policy. Nursing research can be helpful in determining the appropriate strategies which can be most effective in awareness of prevention of nosocomial infection. More research studies should be conducted to justify the proper educational base to develop awareness about the impacts of nosocomial infection. The results of the study encourage for conducting research in various aspects regarding nosocomial infection

NURSINGADMINISTRATION

As an administrator we must take initiation in formation policies on various aspects of care. Nurse administrator organize various developmental programme and in-service education on assessing the level of knowledge on prevention of nosocomial infection among health care workers. Being the top level, nurse's administrators owe the responsibilities of not only handling the nurse from proper work but also to improve the quality of nursing by increasing their knowledge and skills. Nursing administrators can organize various on service education and special training program for nurses to update their regarding the infection and its impact on health.

CONCLUSION

The present study concluded that healthcare workers at Kannur Medical College had an overall moderate level of knowledge regarding the prevention of nosocomial infections. Although a considerable proportion of participants demonstrated adequate knowledge, a small percentage still possessed inadequate understanding of infection prevention measures.

Therefore, the study highlights the need for regular educational interventions, in-service training programs, workshops, and updated infection control guidelines to enhance the knowledge and practices of healthcare workers. Improving awareness and compliance with infection prevention measures can contribute significantly to minimizing nosocomial infections and promoting quality healthcare services.

Declaration of Conflicting Interests

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