



# International Journal of Advance Research in Medical Surgical Nursing

E-ISSN: 2663-2268  
P-ISSN: 2663-225X  
IJARMSN 2022; 4(1): 19-22  
Received: 19-10-2021  
Accepted: 09-12-2021

**G Srilakshmi**  
M.Sc. Department of Medical  
Surgical Nursing, NRI College  
of Nursing, Guntur, Andhra  
Pradesh, India

**N Usha Rani**  
Assistant Professor,  
Department of Medical  
Surgical Nursing, NRI College  
of Nursing, Guntur, Andhra  
Pradesh, India

**Corresponding Author:**  
**G Srilakshmi**  
M.Sc. Department of Medical  
Surgical Nursing, NRI College  
of Nursing, Guntur, Andhra  
Pradesh, India

## A study to assess the knowledge and practice regarding infection prevention among health care members in a selected hospital, Chinakakani, Guntur district Andhra Pradesh

**G Srilakshmi and N Usha Rani**

**DOI:** <https://doi.org/10.33545/surgicalnursing.2022.v4.i1a.81>

### Abstract

**Background:** Hospital acquired infection is also called a nosocomial infection. Hospital acquired infection can be caused by bacteria, viruses, fungi and parasites. These microorganisms may already be present in the patient's body or may come from the environment, contaminated hospital equipment, health care workers, or other patients.

**Objective:** To estimate the existing knowledge and practice regarding infection prevention among health care members.

**Materials and Methods:** A descriptive study was adopted to find the a study to assess the knowledge and practice regarding infection prevention among health care members in a selected hospitals, chinakakani, Guntur district Andhra Pradesh. A total of sample 200 health care members were selected by using Stratified Random sampling Technique. Data was analysed by using descriptive and inferential statistics.

**Results:** Majority 68.5% (51-75%) of the health care members had moderate knowledge, and 47% of them had inadequate knowledge ( $\leq 50\%$ ) and none of them had adequate knowledge ( $> 75\%$ ) the regarding infection prevention. In the present study it was also found that the mean 22 with a standard deviation of 5.54. Majority 80% (51-75%) of health care members had fair practice, and 12.5% of them had good practice ( $\geq 76\%$ ) and none of them had poor practice ( $\leq 50\%$ ) the regarding infection prevention. In the present study found that the mean 14.25 with a standard deviation 5.75. The chi-square test was calculated to find out the association between the knowledge of health care members with their socio-demographic variables like age, gender, work experience, profession.

**Conclusion:** The research concludes the study by showing the assess the knowledge and practice regarding infection prevention among health care members in a selected hospital chinakakani, Guntur district, Andhra Pradesh.

**Keywords:** Assess, knowledge, practice, health care members, infection prevention

### Introduction

Hospital could also be a residential establishment which provides short- term and long-term medical care consisting of observational, diagnostic, therapeutic and rehabilitative services for persons suffering or suspected to be suffering from a disease or injury and for high-quality service delivery at the ability level. Hence, Hospital acquired infections associated morbidity and mortality are preventable through infection prevention strategy like, proper hand hygiene, isolation, cleaning and disinfection, fumigation, sterilization, personal protective parturient. It going to or might not also provide services for ambulatory patients on an out -patient basis <sup>[1]</sup>.

Infection is a painful fact of life and the chief cause of death. Even though the major infectious diseases are controlled still infections are the main cause for disability and mortality. It is no surprise then, that a fear of infection is deeply rooted in the human consciousness <sup>[2]</sup>. Hospital acquired infections are infections that weren't present or incubating at the time of admission and are received by the patient during the method of care in a hospital or any other health care facility. Hepatitis B virus, hepatitis C Virus, and Human immunodeficiency virus infection are commonest Hospital acquired infections, mostly transmitted by healthcare workers who fail to practice infection prevention measures. Hence, Healthcare workers are front of protecting themselves and clients from infection.

Infection prevention may be a process of placing barrier between susceptible host and the microorganisms and a significant component of safe and equipment, surveillance. Hospital acquired infection is also called a nosocomial infection. This is an infection that first appears between 48 hours and four days after a patient is admitted to a hospital or other health care facility. Hospital acquired infection can be caused by bacteria, viruses, fungi and parasites. These microorganisms may already be present in the patients body or may come from the environment, contaminated hospital equipment, health care workers, or other patients. Depending on the causal agents involved, an infection may start in any part of the body. A localized infection is limited to a specific part of the body and has local symptoms. A generalized infection enters the blood stream and causes systemic symptoms such as fever, chills, low blood pressure, or mental confusion. This can lead to sepsis, a serious, rapidly progressive multi-organ infection that results in death. The most common type of hospital-acquired infections are urinary tract infections, pneumonia, and surgical wound infection<sup>25</sup>.

**Objectives**

1. To estimate the existing knowledge and practice regarding infection prevention among health care workers.
2. To find out the correlation between knowledge and practice regarding infection prevention among health care members.
3. To determine the association between knowledge and practice checklist scores with their selected variables.

**Hypothesis**

**H1:** There will be a significant association between knowledge regarding infection prevention among health care members with their selected variables.

**H2:** There will be significant association between practices regarding infection prevention among health care members with their selected variables.

**H3:** There will be a significant relation to the knowledge and practice regarding infection prevention among health care members.

**Materials and Methods**

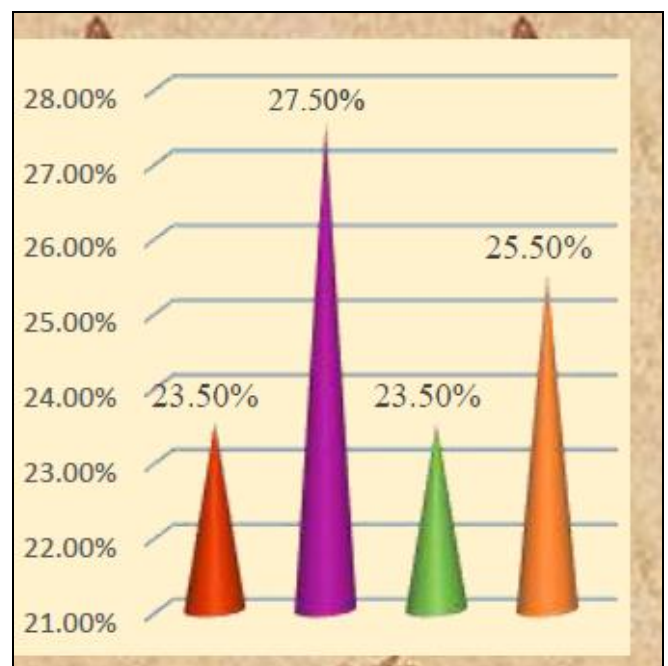
A descriptive study was adopted to find the a study to assess the knowledge and practice regarding infection prevention among health care members in a selected hospitals, chinakakani, Guntur district, Andhra Pradesh. A total of sample 200 health care members were selected by using stratified random sampling technique. Data was analysed by using descriptive and inferential statistics.

**Validity and reliability**

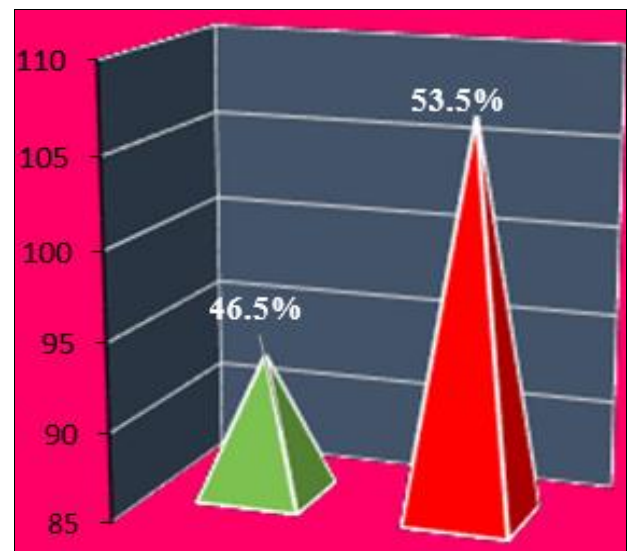
Reliability is the degree of consistency and accuracy with which an instrument measures the attribute for which it is designed to measure. The reliability of the structured knowledge questionnaire and practice check list was established by using Test Re-test method. In order to establish the reliability, the tool was infection prevention among health care members, NRI general hospital, Mangalagiri, Guntur district, Andhra Pradesh. The reliability quotient obtained for the knowledge tool was  $r=0.82$ , for the practice check list  $r=0.85$ . Hence, the tool is reliable.

**Results**

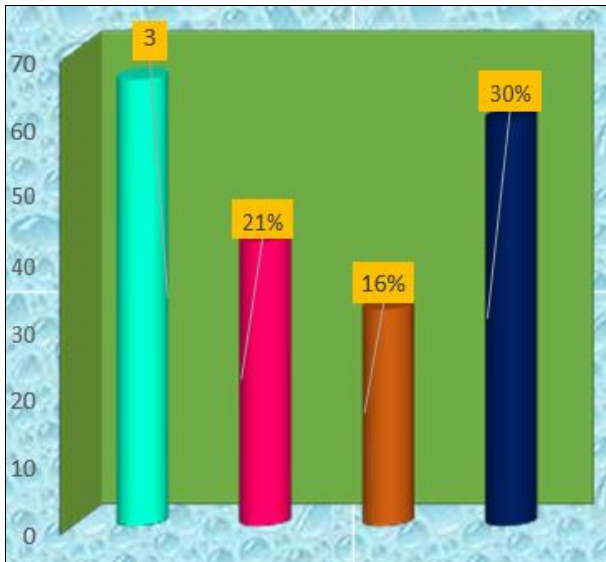
Majority 68.5% (51-75%) of the health care members had moderate knowledge, and 47% of them had inadequate knowledge ( $\leq 50\%$ ) and none of them had adequate knowledge ( $>75\%$ ) the regarding infection prevention. In the present study it was also found that the mean 22 with a standard deviation of 5.54. Majority 80% (51-75%) of health care members had fair practice, and 12.5% of them had good practice ( $\geq 76\%$ ) and none of them had poor practice ( $\leq 50\%$ ) the regarding infection prevention. In the present study found that the mean 14.25 with a standard deviation 5.75. The chi-square test was calculated to find out the association between the knowledge of health care members with their socio-demographic variables like age, gender, work experience, profession. The calculated values of socio-demographic variables of the health care members such as age ( $\chi^2=13.51^*$ ), gender ( $\chi^2=6.39^*$ ), work experience ( $\chi^2=13.89^*$ ), profession ( $\chi^2=28.8^*$ ).



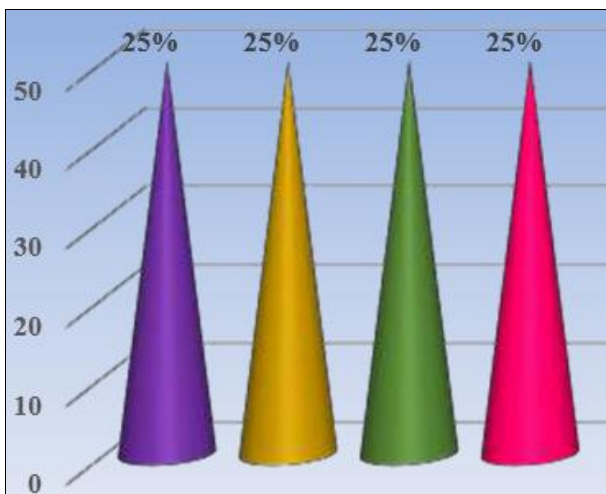
**Fig 1:** percentage distribution of health care workers according to their age



**Fig 2:** Percentage distribution of health care members according to their gender



**Fig 3:** Percentage distribution of health care members according to their work experience



**Fig 4:** Percentage distribution of health care members according to their profession

**Table 1:** Mean and standard deviation for overall knowledge scores and practice checklist scores of health care members regarding infection prevention

S. No	Item	Mean	SD
1.	Knowledge	22	5.54
2.	Practice	14.25	5.75

**Table 2:** Correlation between the knowledge scores and practices checklist scores regarding infection prevention among health care members

S. No	Research variables	Pearson correlation	P value
1.	Knowledge and Practice checklist Scores	0.325*	0.138

**Table 3:** Association between the knowledge scores of health care members with their socio demographic variables

S.no	Socio demographic Variables	X2 cal value	Table value (p=0.05)	Degrees of freedom
1.	Age	13.51*	12.59	6
2.	Gender	6.39*	5.99	2
3.	Work experience	13.89*	12.59	6
4.	Profession	28.8*	12.59	6

**Table 4:** Association between the knowledge scores of health care members with their socio demographic variables

S.NO	Socio demographic Variables	X2 cal value	Table value (p=0.05)	Degrees of freed
1.	Age	13.1*	12.59	6
2.	Gender	6.57*	5.99	2
3.	Work experience	16*	12.59	6
4.	Profession	15.03*	12.59	6

Table-1 the above table reveals that the mean of the overall knowledge scores 22 and standard deviation 5.54. The table shows that the mean of the overall practice checklist scores 14.25 and standard deviation 5.75.

Table-2 the above table shows that correlation between knowledge and practice regarding infection prevention among health care members by karl pearson formula with the level of significance 0.138.

Table-3 the chi-square was computed. Hence H1 that is, there will be a significant association between the knowledge scores of infection prevention and selected demographic variables among health care members has been accepted. Because, the results showed that there was significant relationship between the knowledge of health care members with their age, gender, work experience, profession as a health care members. Table-4 the chi-square was computed. Hence H2 that is, there will be a significant association between the practice checklist scores of infection prevention and selected demographic variables among health care members has been accepted. Because, the results showed that there was significant relationship between the practice checklist of health care members with their age, gender, work experience, profession.

**Discussion**

Majority 68.5% (51-75%) of the health care members had moderate knowledge, and 47% of them had inadequate knowledge ( $\leq 50\%$ ) and none of them had adequate knowledge ( $>75\%$ ) the regarding infection prevention. In the present study it was also found that the mean 22 with a standard deviation of 5.54. Majority 80% (51-75%) of health care members had fair practice, and 12.5% of them had good practice ( $\geq 76\%$ ) and none of them had poor practice ( $\leq 50\%$ ) the regarding infection prevention. In the present study found that the mean 14.25 with a standard deviation 5.75. In the present study correlation between knowledge and practice regarding infection prevention among health care members by Karl pearson formula with the level of significance. In the present study association between the knowledge of health care members with their socio- demographic variables.

The chi-square test was calculated to find out the association between the knowledge of health care members with their socio-demographic variables like age, gender, work experience, profession.

**Limitations**

- The present study is limited to
  - 200 health care members.
  - Health care members in NRI general hospital, chinakani, Guntur district, Andhra Pradesh.

**Recommendation**

Based on the findings of the present study, the follow recommendations have been made:

- A similar study can be done on a large sample to generalize the findings.
- A descriptive study can be done to assess the knowledge of health care members regarding infection prevention.
- A quasi-experimental study can be done.
- A structured teaching programme can be conducted to enhance the knowledge of health care members on infection prevention.

#### **Ethical clearance**

Ethical consideration was obtained from the institutional ethical committee, permission was taken from medical superintendent, HR department and consent was obtained from the subjects.

**Source of funding:** Self

#### **References**

1. Vinodhini K, Bhooma Devi A. Study on infection control practices among health care workers in a speciality hospital, Chennai. 2016;35(3):549-555.
2. Mark M, Berkow R, MD, editors. Immunization for adults. In the mark manual of diagnosis and therapy. 2004.
3. WHO Guidelines on Hand Hygiene in Health Care: a Summary [Internet]. WHO. 2009. Available: [www.who.int/patientsafety/en/](http://www.who.int/patientsafety/en/). 2009.