

# A study to evaluate the effectiveness of video assisted teaching on knowledge regarding nosocomial infection among Nursing students in selected college at Chennai

Maheswari Jaikumar<sup>1</sup>, Cecilia Vardhini<sup>2\*</sup>

<sup>1</sup>Professor and Principal, <sup>2</sup>Associate Professor, Pediatric Nursing Department, Meenakshi College of Nursing, MAHER, Mangadu, Chennai, 600069, Tamil Nadu, INDIA.

Email: [nurceva@gmail.com](mailto:nurceva@gmail.com)

## Abstract

Nosocomial infection is also called hospital acquired infections. These infections are most commonly caused by gram positive bacteria *Staphylococcus aureus* is most common pathogen responsible for these infections and gram negative bacteria, *E.coli* is also common pathogen. The common nosocomial infection is pneumonia in ICU and UTI in general ward. The objective was to check the awareness of nosocomial infection between different health care practioner and patients. The sample population comprised of BSc (N) students. The data shows that out of 42 students in pre-test 1(2.3%) had inadequate knowledge, 41 (97.6%) had moderate adequate knowledge, 0 (0%) had adequate knowledge. In post-test, 40 (95.2%) had adequate knowledge, 2 (4.7%) had moderately knowledge, and none of them had inadequate knowledge. These infections also spread due to the bad sanitization quality of hospital beds bad qualities. People do not have awareness about the nosocomial so, awareness campaign was organized to avoid these infections.

**Key Words:** Nosocomial Infection, *Staphylococcus*, Knowledge, College Students.

## \*Address for Correspondence:

Dr. Cecilia Vardhini, Associate Professor, Pediatric Nursing Department, Meenakshi College of Nursing, MAHER, Mangadu, Chennai, 600069, Tamil Nadu, INDIA.

Email: [nurceva@gmail.com](mailto:nurceva@gmail.com)

Received Date: 12/06/2018 Revised Date: 20/07/2018 Accepted Date: 27/08/2018

DOI: <https://doi.org/10.26611/1005101>

Access this article online	
Quick Response Code:	Website: <a href="http://www.medpulse.in">www.medpulse.in</a>
	Accessed Date: 08 October 2018

## INTRODUCTION

According to world health organization (WHO) a nosocomial infection is defined as “An infection occurring in a patient in a hospital or other healthcare facility in whom the infection was not present or incubating at the time of admission”. Nosocomial infections (also known as hospital associated / acquired

infections) are those infections that develop in patients during their stay in hospitals or other type of clinical facilities, which were not present at the time of admission

## MATERIAL AND METHODS

A non-experimental descriptive study design was adopted to assess the knowledge on nosocomial infection among B sc (N) III year students of Meenakshi College of Nursing. The setting was chosen on the basis of feasibility. The samples were selected using purposive sampling technique with sampling size of 42. Inclusive criteria were Students who knows to speak English. Students who were available during the data collection. The study was conducted by using structured multiple choice questions.

**Data Analysis:** The data collection for study was done in Meenakshi College of Nursing at. It is a self administered tool. Descriptive and inferential statistics were used to analysis the collected data. Frequency and percentage

distribution were used to analyses the demographic data. Mean, range and standard deviation were used to identify the knowledge about nosocomial infection. The chi-square is used to find the association of demographic variables with the level of the knowledge.

## RESULT

**Table 1:** Frequency and percentage distribution in pre-test and post-test table-1 n=42

Levels Of Knowledge	Pre-Test		Post-Test	
	n	%	n	%
Inadequate knowledge	1	2%	0	0%
Moderate Knowledge	41	97%	2	4.7%
Adequate Knowledge	0	0%	40	95%

The data present in the table show that out of 42 students in pre-test 1 (2%) had inadequate knowledge, 41 (97%) had moderate adequate knowledge, 0 (0%) had adequate knowledge. In post-test, 40 (95%) had adequate knowledge, 2 (4%) had moderately knowledge, and 0 (0%) had inadequate knowledge.

**Table 2:** Comparison of pre-test and post-test mean knowledge

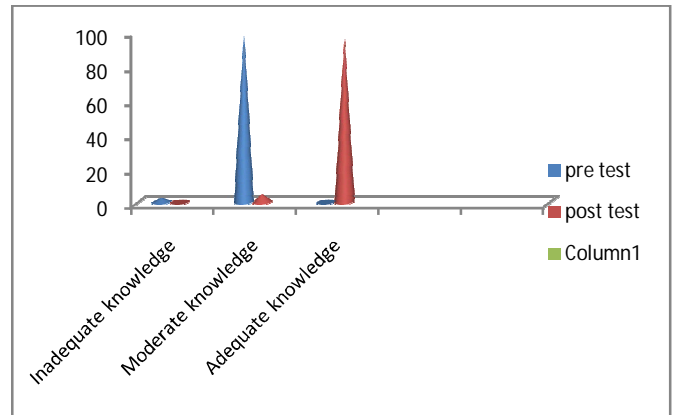
Variables	Mean	Standard Deviation	t value
Pre test	10.35	1.44	1.04 (S)
Post test	16.19	1.63	

The above data reveals that the post test mean knowledge score 16.19 was higher than the pre test mean knowledge score 10.35 among students. The obtained “t” value was significant at P<1.04 level. Hence the stated hypothesis was accepted it is inferred that the structured teaching program regarding the nosocomial infection was highly effective for participants to acquire more knowledge about nosocomial infection.

**Table 3:** Association of knowledge with causative organism

Variables	Inadequate		Moderately adequate		Adequate		Chi-square
	n	%	n	%	n	%	
<b>Nosocomial infection caused by</b>							
Bacteria	0	0%	2	47%	30	71%	0.63%(s)
Virus	0	0%	0	0%	4	9%	
Fungi	0	0%	0	0%	6	14%	

Table show that with regard to causes of nosocomial infection, about bacteria 0 (0%) had inadequate knowledge, 2 (4%) had moderately knowledge, 30 (71%) had adequate knowledge, about virus 0 (0%) had inadequate knowledge, 0 (0%) had moderately knowledge, 4 (9%) had adequate knowledge, about fungi 0 (0%) had inadequate knowledge, 0 (0%) had moderately knowledge, and 6 (14%) had adequate knowledge. The obtained X<sup>2</sup>value is 0.6, which was statistically significant.



**Figure 1:** Distribution of samples according to the level of knowledge in pre-test and post-test

## DISCUSSION

This chapter deals with the discussion of the study to assess the effectiveness of video assisted teaching on knowledge regarding nosocomial infection among B sc (N) students in selected college at Chennai. Knowledge was assessed before and after giving structured teaching program. The levels of knowledge in pretest 1(2%) had inadequate knowledge 41(97%) had moderately adequate knowledge and remaining 0(0%) adequate knowledge in post test 0(0%) had adequate knowledge 2(4%) moderately adequate knowledge and 40(95%) had inadequate knowledge. This study is supported by a study conducted by ROBERT W. HALEY *et al* (2016). He studied the nosocomial infection rate among the 6,449 acute care US hospital in 1975-1976 which was 5.7 nosocomial infection per 100 admission and that over 2 million nosocomial infection occurred in a 12 month period in these hospitals nosocomial urinary tract infection constituted 42% of the infection, surgical wound infection 24% nosocomial pneumonia 10% nosocomial bacteria 55 and nosocomial infection at all other sites 19% if adjustment are made for the accuracy of the diagnostic method the increasing national wide secular trend and the number of nosocomial infection. To associate the level of knowledge on nosocomial infection before and after video teaching. The level of knowledge on nosocomial infection with demographic variables the chi-square value shows that there was a statistically significant associated between the level knowledge with selected demographic variables such as place of residence. On education session increase the knowledge and compliance.

## CONCLUSION

The study findings revealed that there was a significant improvement in the post-test; the improvements mean score was with “t” value of (1.04). The findings of the

study demonstrated that video assisted teaching session increases the knowledge and compliance.

## REFERENCE

1. Robert W. Haley et al (2016) “The nationwide of nosocomial infection rate”, second edition, 3<sup>rd</sup> volume, page.no:159-169, <http://doi.org/10.1093/oxfordjournals>.
2. S.P stone and B.S Cooper et al (2007) “guidelines for nosocomial infection,” 5<sup>th</sup> edition, 2<sup>nd</sup> volume page.no:836-840, <http://doi.org/10.1093/jac/dkmo55>.
3. R. Monika Kleve’s et al (2000) in risk factor for nosocomial infection,6<sup>th</sup> edition,2<sup>nd</sup> volume, oxford journals, page.no:811-819.
4. Nadeem MD and Taylor et al (2002) “impact of allergenic packed red cell transmission of nosocomial infection,” 30<sup>th</sup> edition, 3<sup>rd</sup> volume, page: no: 2249-2254
5. Robert A. Weinstein, Hota et al (2002) “clinical infection disinfection and contamination of nosocomial infection”, 8<sup>th</sup> edition, page.no: 182-189.
6. XUAN et al (2006) “preparation of new bio-absorbent using chemical modified orange peel”, 2<sup>nd</sup> edition page.no:198-201.
7. Allegranzi B, Manish ZA, Donaldson L, Pitter D, WORLD HEALTHORGANISATION et al(2001) “American journals of infection control”, 3<sup>rd</sup> edition, page.no: 28-34.
8. Lewi (2000), “The text book of medical surgical nursing” 2<sup>nd</sup> edition, published by Elsevier, page.no: 1345-1347.
9. Brunner and suddarth, “The text book of medical surgical nursing”3<sup>rd</sup> edition, published by Elsevier, page. no: 885-889.
10. C.P. Baveja, “the text book of microbiology”, 3<sup>rd</sup>edition, published by American journal, page. no: 98-100.

Source of Support: None Declared  
Conflict of Interest: None Declared

