



A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NOSOCOMIAL INFECTION AMONG B.SC NURSING STUDENT IN A SELECTED NURSING INSTITUTE

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ABSTRACT

Nosocomial infections, also known as hospital-acquired infections (HAIs), are infections that occur in patients during hospitalization or while receiving treatment in a healthcare facility. These infections usually develop 48 hours or more after admission and are not present or incubating at the time of admission. Nosocomial infections remain a significant challenge in healthcare systems worldwide due to their impact on patient safety, increased morbidity and mortality, prolonged hospital stay, and rising healthcare costs. Common types include urinary tract infections, surgical site infections, respiratory tract infections, and bloodstream infections caused by microorganisms such as bacteria, viruses, and fungi. Hospital-wide prevalence of HCAI varied from 5.7% to 19.1% with a pooled prevalence of 10.1%. Of note, the pooled HCAI prevalence was significantly higher in high- than in low-quality studies (15.5% vs 8.5%, respectively). Surgical site infection (SSI) is the most surveyed and most frequent type of infection in low- and middle-income countries with incidence rates ranging from 1.2 to 23.6 per 100 surgical procedures and a pooled incidence of 11.8%.

KEYWORDS

Nosocomial Infection , Stp, Knowledge, Nursing Institute

INTRODUCTION

Nosocomial infection, also known as hospital-acquired infection (HAI), refers to an infection that develops in a patient during hospitalization or while receiving treatment in a healthcare facility and was not present at the time of admission. These infections usually appear after 48 hours of hospital stay and may affect patients, healthcare workers, and visitors. Nosocomial infections are considered a major global health problem because they increase patient suffering, prolong hospital stay, raise treatment costs, and may lead to serious complications or death. Common types of nosocomial infections include urinary tract infections, surgical site infections, respiratory tract infections, bloodstream infections, and skin infections. They are commonly caused by bacteria, viruses, fungi, and other microorganisms that spread through contaminated hands, medical equipment, hospital environments, or invasive procedures such as catheterization and surgery. Patients with weakened immune systems, chronic illnesses, or prolonged hospitalization are at greater risk of developing these infections. better and improved bonding may develop with the surrounding matrix, and that may result in higher compressive strength.

OBJECTIVES OF THE STUDY

1. To assess the pretest knowledge regarding Nosocomial infection among BSc nursing students
2. To plan and implement the Structured Teaching programme regarding Nosocomial infection among BSc nursing students.
3. To assess the post- test knowledge regarding the Nosocomial infection among BSc nursing students.
4. To compare the pretest and posttest knowledge regarding Nosocomial infection among BSC Nursing students with their selected socio demographics variables.
5. To find out the association of knowledge regarding Nosocomial infection among BSc nursing students with their selected socio demographic variables.

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Socio demographic variables	Category	Frequency (f)	Percentage (%)
Age (in years)	≤ 18 years	18	32.7
	19 – 22 years	37	67.3
Gender	Male	7	12.7
	Female	48	87.3
Religion	Hindu	42	76.4
	Muslim	6	10.9
	Christian	5	9.1
	Others	2	3.6
Area of residence	Urban	29	52.7
	Rural	26	47.3
Type of family	Nuclear	36	65.5

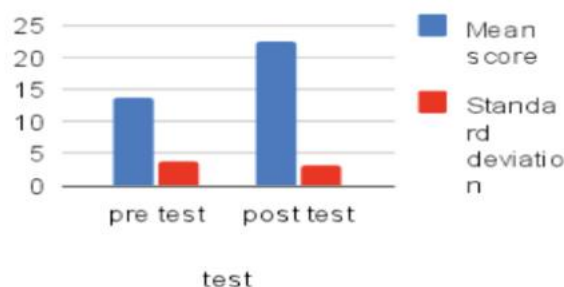
	Joint	19	34.5
Currently residing in	Hostel	21	38.2
	With family	26	47.3
	Rented room / PG	8	14.5
Previous source of knowledge on nosocomial infection	Books	11	20.0
	Teachers	19	34.5
	Internet	15	27.3
	Others	10	18.2

SECTION D: GRAPHICAL REPRESENTATION OF PRE-TEST AND POST-TEST KNOWLEDGE SCORES

Graphical representation provides a visual understanding of the difference in knowledge scores among B.Sc. Nursing 1st year students before and after the structured teaching programme. It helps in better interpretation of data by showing the magnitude of change in mean scores visually.

IMPLICATIONS FOR NURSING

Mean score and Standard deviation



PRACTICE AND ADMINISTRATION

The study provides a strong rationale for policy and curriculum changes to enhance patient safety.

- **Improving Clinical Practice:** Enhanced knowledge among students prepares them to apply correct infection control practices, thereby helping to **reduce the risk of nosocomial infections** in hospitals.
- **Curricular Integration:** Nursing administration should actively take part in policy making, developing and implementing an **integrated curriculum** that incorporates systematic, evidence-based teaching on critical infection control topics like nosocomial infections.
- **Professional Development:** The findings support the

development of professionally competent nurses who can contribute to quality care and safer healthcare environments by possessing adequate knowledge of infection control.

CONCLUSIONS

Based on the detailed analysis of the data collected from B.Sc. Nursing 1st year students, the following conclusions are drawn regarding the effectiveness of the structured teaching programme on knowledge of nosocomial infection:

IMPLICATION OF THE STUDY

The study overwhelmingly demonstrated the **high effectiveness** of the structured teaching programme in enhancing the students' knowledge about nosocomial infections.

- **Significant Knowledge Gain:** The comparison of pre-test and post-test scores revealed a **highly significant increase** in knowledge ($t=14.32$, $p<0.001$). The mean knowledge score dramatically increased from **13.80** (Pre-test) to **22.47** (Post-test), confirming that the educational intervention was the direct cause of the improvement.
- **Shift in Knowledge Level:** Before the intervention, the majority of students (**50.9%**) had **below average** knowledge. After the programme, this figure drastically dropped to **3.6%**, while the proportion of students with **good knowledge** surged from a mere **7.3%** to **74.5%**.

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