Research Article

A Study to Assess the Knowledge Regarding Nosocomial Infection among B.Sc. Nursing Students in Selected Nursing Institutions of Pune City

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Abstract
Nosocomial infection or Hospital acquired infection (HAI) are frequent, complication affecting hospitalized patients after the admission within 72 hours. Now a days students are taking clinical experience from various health care setting. globally more than 1.4 million people suffering from the nosocomial infection complications. In India the rate of nosocomial infection in year 2010-2011 is 38.7% of hospitalized patient.
The objectives of the study were,
a) To assess the knowledge regarding nosocomial infection among the B.Sc.Nursing students.

Material and Methods: The research approach adopted for the study was quantitative research approach and the research design was descriptive research design. A total number of 200 B.Sc. nursing students were selected by using non-probability convenient sampling technique.

Result and Findings: The sample under study comprised of the following demographic variables:

Introduction
Health care-associated infections have long been recognized as crucial factors bedeviling the quality and outcomes of health care delivery. An infection is considered nosocomial if it becomes evident 48 hours or more after hospital admission or within 30 days of discharge following inpatient care. Reported cases of nosocomial infection assumed such terrifying proportions in 2002 that World Health Organization member states approved a World Health Assembly resolution on patient safety. Developing countries were reported to have up to 20 times the risk of contracting a nosocomial infection compared with developed countries. Thus, spread of infection serves as a major source of worry for managers in health care practice, particularly in developing countries. According to Robert, acquisition of a nosocomial infection can prolong duration of hospitalization, increase the costs of health care, and place a serious economic burden on patients and their families. This scenario should alert clinical instructors and supervisors to the need to pay adequate attention to imparting knowledge to students throughout their training period about measures to prevent nosocomial infections. In one survey, 27% of participating health care students reported insufficient emphasis on teaching about infection control in their training program, whilst 50% expressed a desire for more emphasis on isolation...
procedures during their training. National evidence based guideline for preventing hospital acquire infection are available in United Kingdom at one time 19% of inpatient will have infection acquire during stay in hospital, here the health care system is already overstretched.

Need f the Study
Nosocomial infections or healthcare associated infections occur in patients under medical care. These infections occur worldwide both in developed and developing countries. Nosocomial infections accounts for 7% in developed and 10% in developing countries. As these infections occur during hospital stay, they cause prolonged stay, disability, and economic burden. Frequently prevalent infections include central line-associated bloodstream infections, catheter-associated urinary tract infections, surgical site infections and ventilator-associated pneumonia. Nosocomial pathogens include bacteria, viruses and fungal parasites. According to WHO estimates, approximately 15% of all hospitalized patients suffer from these infections. During hospitalization, patient is exposed to pathogens through different sources environment, healthcare staff, and other infected patients. Transmission of these infections should be restricted for prevention. Hospital waste serves as potential source of pathogens and about 20%–25% of hospital waste is termed as hazardous. Nosocomial infections can be controlled by practicing infection control programs, keep check on antimicrobial use and its resistance, adopting antibiotic control policy. Efficient surveillance system can play its part at national and international level. Efforts are required by all stakeholders to prevent and control nosocomial infections. There were 663 patients admitted to the ICU during the two-year study period. This represented 2891 total patient days of admission during which patients were ventilated for 2175 days. Of the 663 admissions, 114 (17%) developed culture-confirmed nosocomial sepsis. Table 1 lists the characteristics of the study patients. The majority of the patients had prior admission to other wards before admission to ICU. Males were more commonly represented than females and almost all patients had been mechanically ventilated with a median period of 8 days of ventilation.

The incidence occur depends upon the intrinsic host factor extrinsic environment factor. Mortality increases in order to LRI, BSI, UTI, lo5ng term physical and neurological consequences, etc.

Statement Problem
A study to assess the knowledge regarding nosocomial infection among the B. sc. nursing student in selected nursing institutions in Pune city.

Objectives
➢ To assess the knowledge regarding nosocomial infection among the B. sc. nursing student.

Methodology
Descriptive research was used to assess the level of knowledge regarding nosocomial infection among B.sc Nursing students in the selected institutions of Pune city. The target population who fulfills the inclusion criteria are selected for this study, a non-probability convenient Sampling Technique was used to select 200 samples. A 27 Self-Structured Questionnaires were formulated to assess the Level of Knowledge. Each corrected answer was given a score of one and wrong answer zero score. The score between poor 0–9, Average 10–18, Good 19–27 and 27 The tool was validated by 5 experts in department of Medical surgical Nursing faculty. Valuable suggestions were incorporated and tool was finalized. Permission was obtained from undergraduate research monitoring committee and institute ethical committee.

The reliability of tool was established by conducting a pilot study. The data collection was conducted for one month in selected areas of Pune city. The investigator first introduced themselves...
to the Adolescent and developed a good rapport with them. The investigators explained the purpose of the study and then gained their confidence by obtaining a written consent from samples. The data collection was done by questionnaire method a separate questionnaire was used for each adolescent. Approximately 27 minutes were spent for each sample. Similarly the same data procedure was followed for the entire 200 samples.

**Major Study Findings**

**Table -2** Frequency percentage of knowledge score

<table>
<thead>
<tr>
<th>n =200</th>
<th>Knowledge score</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Sr no.</td>
<td>Good knowledge</td>
<td>66</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Average knowledge</td>
<td>128</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>Poor knowledge</td>
<td>06</td>
<td>03%</td>
</tr>
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**Interpretation**

In control group majority of b.sc nursing students (100%) having good knowledge regarding nosocomial infection is 33%, 64% students having a average knowledge regarding nosocomial infection and 03% students having a poor knowledge regarding nosocomial infection.

**Implications**

The present study can help nurses to enrich the awareness through outreach programme regarding nosocomial infection to B.sc nursing. Basic nursing education should give importance to the medical health, infection, early detection of disease and to remove the fallacy on nosocomial infection. The findings of the study help the medical-surgical nurses and students to develop the inquiry baseline. The general aspect of the study result can be made by further researcher to identify the level of fallacy regarding nosocomial infection among B.sc nursing.

**Conclusion**

After the detailed analysis this study leads to the following conclusion that the overall knowledge of the adolescent of 64 % of the B.sc nursing students have an average knowledge regarding nosocomial infection and 33 % of the B.sc nursing students have a good knowledge regarding nosocomial infection. Thus the study findings clearly reveal that the knowledge of B.sc nursing students regarding nosocomial infection is average need to create the awareness and instill a positive approach regarding nosocomial infection.

**Acknowledgement**

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