Knowledge on prevention of nosocomial infection among student nurses

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Abstract

Background: Nosocomial infection acquired during hospital stay. This infection concern 10-15% hospitalized patient and can head to complications of pneumonia, urinary tract infection, blood stream infection and meningitis. In 25-30% of those admitted in ICU. Nosocomial infections are the problem in both developed and developing countries.

Aim: To assess the level of knowledge regarding prevention of nosocomial infection among student nurses.

Material and method: The study was conducted by using cross sectional descriptive research design, the samples are selected through Non probability convenient sampling technique.

Statistical Analysis Used: The collected data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study.

Results and Conclusion: The study results shows that with regards to level of knowledge among student nurses 1(3.33%) had A+, 3(10%) had A, 2(6.67%) had B+, 14(46.67%) had B, 4(13.33%) had C, 6(20%) had D knowledge.

Keywords: Knowledge, nosocomial infection, hospital, student nurses

Introduction

Nosocomial infection is also known as hospital acquired infection (HAI) is an infection that is contracted from the environment or staff of a health care facility. It can be spread in the hospital environment, nursing homes, rehabilitation facility, clinic or other clinical settings. Nosocomial infections are caused by the organism, the most commonly responsible for these infections are pseudomonas, klebsiella, e-coli, pathogenic fungi and virus such as HIV and Hepatitis A and B. Usually this infection occur in debilitated patients who are hospitalized for long period, very young and old people are also vulnerable [1].

Nosocomial infections spread to the susceptible patients in the clinical settings by means of contaminated equipment, bed, linens or air droplets. The infection can originate from the outside environment, another infected patient, staff that may be infected, or in some cases, the source of infection can’t be determined. Nosocomial infection may occur sporadically or as out breaks. Etiological diagnosis by the routine bacteriological method of smear, culture, identification and sensitivity testing. The outbreaks occur the source should be identified and eliminated. The causes of infection may be defective autoclave or improper techniques such as boiling infections set in ward sterilizer [2].

The preventive measures of nosocomial infections are hand washing with disinfectants and detergents, hygienic hand rubs - rubbing fast acting antiseptics preparations on to hands, preoperative antibiotic prophylaxis and using personal protecting equipments like gloves, mask, gown and cap etc [3].

Objectives of the Study

• To assess the level of knowledge regarding prevention of nosocomial infection among student nurses.

• To find out the association between the level of knowledge regarding nosocomial infection among student nurses with their selected socio demographic variables.
Detailed Research Plan

Research approach: The research approach adopted for the study was quantitative.

Research design: The research survey design used for the present study was cross sectional descriptive research design.

Setting of the study: The setting selected for the present study was Narayana Medical College Hospital, Nellore.

Sample size: The sample size was 30 student nurses working in Narayana College of nursing, Nellore.

Sampling technique: Non probability convenient sampling technique was adopted for this study.

Result and Conclusion

Table 1: Frequency and Percentage Distribution of Level of Knowledge Regarding Prevention of Nosocomial Infection among Student Nurses (n=30)

<table>
<thead>
<tr>
<th>Level Of Knowledge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>A</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>B+</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>B</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1: shows that with regards to level of knowledge among student nurses 1(3.33%) had A+, 3(10%) had A, 2 (6.67%) had B+, 14 (46.67%) had B, 4(13.33%) had C, 6(20%) had D.

Table 2: Mean and standard deviation of knowledge regarding prevention of nosocomial infection among student nurses.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>33.3</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Table 2: Shows that knowledge score that for student nurses mean was 33.3 and standard deviation was 6.4

Association between and level of knowledge regarding prevention of nosocomial infection among student nurses with their selected demographic variables.

Shows that regarding association of level of knowledge regarding prevention of nosocomial infection among student nurses. There is no significant association with age, educational qualification and year of course study.

Nursing Implications

Nursing practice: The study helps the student nurses to determine the level of knowledge regarding prevention of nosocomial infection. Present study motivates to improve their level of knowledge.

Nursing education: Student nurses have to update their knowledge regarding prevention of nosocomial infection, which are practical by different countries.

Nursing administration: Nursing administration should develop certain plans and polices to be implemented to improve the knowledge regarding the renal diet in student nurses.

Nursing research: To assess the level of knowledge regarding prevention of nosocomial infection and therefore more researcher studies can be conducted in their area.

Conclusion

That study concluded that the majority of student nurses had B grade knowledge regarding prevention of nosocomial infection. There was no significant association between the level of knowledge with socio demographic variables such as age, educational qualification and course.
References

7. The nursing journal of Indian; the professional voice of infection control nursing, 2012, 57.