A study to assess the knowledge regarding standard safety precautions in labour ward among nursing students posted at Narayana Medical College Hospital, Nellore, Andhra Pradesh

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Abstract
Background: Safety measures play a vital role in control to prevent cross contamination between health worker and patient and health care worker and between patients. Almost all were aware that improper practices increased risk of nosocomial infections in patients. The most widely incidence of nosocomial wound infection is more in patient mostly the bacterial organism are responsible.

Aim: The aim of the study was to assess knowledge on standard safety precautions in labour ward.

Objectives: 1. To assess the level of knowledge regarding safety measures among nursing students. 2. To associate the level of knowledge with selected demographic variables.

Methodology: 100 nursing students posted in labour ward at NMCH, Nellore were selected by using probability simple random sampling method.

Results: Regarding the level of knowledge among nursing students, 95(95%) were had average knowledge, 4(4%) were had good knowledge 1(1%) were had poor knowledge regarding safety measures in labour ward.

Keywords: Knowledge, standard safety precautions, labour ward, nursing students

Introduction
Universal precautions (UPs) is utmost important in terms of infection prevention to patients and to HCWs also so it should be followed without fail for each and every procedure. It should be used considering every source as infectious and regardless of patient’s diagnosis treatment. To combat hospital infection, it is essential that the hospital according to its available resources and requirement, establishes a Hospital Infection Control Committee [1]. Safety measures are techniques to be used with all clients to disease the risk of transmitting unidentified pathogens. Safety measures obstruct the spread of blood borne pathogens those microorganisms carried in blood and body fluids that are capable of infecting other persons with serious and difficult to treat viral infection like hepatitis B virus, hepatitis C virus and HIV [2].

Standards precautions apply to blood, all body fluids, Secretions (except sweat) non-intact skin and mucus membrane, hands are washed between client contacts. After contact with blood, body fluids secretions and excretions and after contact with equipment or articles contaminated by them and immediately after gloves are removed. Gloves are worn when touching blood, body of secretions, excretions, nonimpact skin, mucus membrane or contaminated item. Gloves should be removed and hygiene performed between client care [3].

Masks, eye protection or face shields are worn if client, care activities may generate splashes or sprays of blood or body fluids. Gowns are worn if spoiling of clothing is lively form blood or body fluid perform hand hygiene after removing gown. Client care equipment if properly cleaned and reprocessed and single use items are discarded [4].

Contaminated linen is placed in leak proof bag and handled so as to prevent skin and mucus membrane exposure. All sharp instruments and needles are discarded in a puncture -resistant container safety devices must be enables after use to prevent injury. A private room is unnecessary unless the client’s hygiene is unacceptable [5].

Need for the Study
Safety measures play a vital role in control to prevent cross contamination between health worker and patient and health care worker and between patients. Almost all were aware that improper practices increased risk of nosocomial infections in patients.
The most widely incidence of nosocomial wound infection is more in patient mostly the bacterial organism are responsible [6].

From the various studies it is revealed that staphylococcus areas infection rate is 41.3%, E.coli infections rate is 29.5% and the pathogens accounting for 70.5% to 80.2% in patients with positive culture [7].

A study was conducted on self-reported infection control practices and perception of HIV (AIDS) risk amongst emergency department nurses in Botswana. 40 questionnaires were distributed to the nurses. The results shows that in-services education and practice initiatives to promote sustainable compliance with safety measures and realistic risk perception among nurses. They recommended that further research is revised to evaluate the nurse’s compliance with safety measures in developed countries using observational methods (or) in-depth interviews [8].

Midwives and nurses should use the standard precautions as the basic level of infection control precautions when delivering care to all patients, regardless of their presumed infection status. Therefore midwives and nurses should have sound knowledge and compliance with standard precaution [9].

Statement of Problem
A study to assess the knowledge regarding on standard safety precautions in labour ward among nursing students posted at Narayana Medical College Hospital, Nellore, Andhra Pradesh.

Objectives
- To assess the level of knowledge regarding safety measures in labour ward among nursing students.
- To associate the level of knowledge with selected demographic variables among nursing students in labour ward.

Delimitations
- Nursing students posted in labour ward at Narayana Medical College Hospital, Nellore.
- Sample size of 100 students.

Methodology

Research approach
A quantitative approach was adopted to determine the research study.

Research Design
The present study was conducted by using descriptive research design.

Setting of the Study
The study was conducted in labour ward at Narayana Medical College Hospital, Nellore.

Target Population
The target population for the present study includes all nursing students.

Accessible Population
The accessible population for the present study was nursing students posted in labour ward at Narayana Medical College Hospital, Nellore and who fulfilled the inclusion criteria.

Sample
The sample for the present study was nursing students.

Sample size
The sample for the present was 100 nursing students.

Sampling Technique
Probability simple random sampling was adapted for the study.

Criteria for sampling selection

Inclusion criteria
- Nursing students posted in labour ward at Narayana Medical College Hospital, Nellore.
- Nursing students present during the time of data collection.

Exclusion criteria
- Nursing students who are not willing to participate in the study.
- Nursing students who were on leave.

Variables of the Study

Research variable: Level of knowledge on safety measures in labour ward.

Demographic variables: Includes age, education, year of study and source of information.

Description of the tool

Part-I: It deals with socio demographic variables.

Part-II: Structured questionnaire to assess the level of knowledge regarding safety measures in labour ward.

Data Analysis and discussion

Table 1: Frequency distribution of level of knowledge regarding safety measures in labour ward among nursing students. (N=100)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of Knowledge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poor Knowledge</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>2.</td>
<td>Average Knowledge</td>
<td>95</td>
<td>95%</td>
</tr>
<tr>
<td>3.</td>
<td>Good Knowledge</td>
<td>4</td>
<td>4%</td>
</tr>
</tbody>
</table>

Fig 1: Percentage distribution of level of knowledge regarding safety measures in labour among nursing students.

Table 2: Mean and Standard Deviation of level of knowledge regarding safety measures in labour among nursing students. (N=100)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing students</td>
<td>16.82</td>
<td>2.380</td>
</tr>
</tbody>
</table>
Table 3: Association between level of knowledge and demographic variables among nursing students. (N=100)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic Variables</th>
<th>Poor knowledge</th>
<th>Average knowledge</th>
<th>Good knowledge</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>ANM</td>
<td>-</td>
<td>2</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>b.</td>
<td>GNM</td>
<td>-</td>
<td>2</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>c.</td>
<td>B.Sc(N)</td>
<td>1</td>
<td>2</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>d.</td>
<td>PC.B.Sc</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>2.</td>
<td>Source of knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>CNE program</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b.</td>
<td>Books &amp; Journals</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>c.</td>
<td>Mass media</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>d.</td>
<td>Family &amp; friends</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Major findings of the study

- Regarding the level of knowledge among nursing students, 95(95%) were had average knowledge, 4(4%) were had good knowledge 1(1%) were had poor knowledge regarding safety measures.
- The mean score of respiratory tract infection of under-five children was 14.49 and standard deviation was 5.5.
- Regarding association between level of risk score and demographic variables, educational qualification and source of knowledge had significant association at P<0.05 level.

Conclusion

The study concluded that majority of the nursing students (95%) had average knowledge regarding safety measures. Since they are posted in the clinical in a regular basis, they have possessed basic knowledge regarding safety measures. Still the nursing students must be encouraged to follow the safety precautions while caring the patients in the hospitals, in order to avoid the complications associated with hospital environment.

References