Effectiveness of planned teaching programme on knowledge of emergency drugs among staff nurses

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Abstract

In the present study, one group pre-test post-test research design was used to assess effectiveness of planned teaching programme on knowledge of emergency drugs among staff nurses working in critical care units in selected hospital. 30 staff nurses were selected by convenient sampling method. Structured knowledge questionnaire were used to assess the effectiveness of planned teaching on emergency drugs among the staff nurses. Descriptive & inferential statistics were used for data analysis. Finding of the study showed that the knowledge of staff nurses after pre-test was not satisfactory; the planned teaching programme helped them to learn about emergency drugs. The post-test knowledge scores showed significant increase in knowledge. The research was conducted with the planned teaching improved knowledge of the staff nurses on emergency drugs.

Introduction

The human body works through complicated services of chemical reactions and process. Drugs are chemical that are introduced into the body to cause some sort of change. When drugs are administered; the body begins a sequence of processes designed to handle the new chemicals. This process which involves, breaking down and eliminating the drugs, in turn affect the body complex, series of chemical reactions. Understanding how drugs act on the body to cause changes and applying that knowledge in the clinical setting are important aspects of nursing practice, for many reasons, for instance, patients today often follow complicated drug regimen and review. Potentially toxic drugs, many also manage their own care at home. The nurse is in a unique position regarding drugs therapy.

Emergency department, the heart of the hospital demands unique expertise to deal with patient requiring prompt emergency care. The nurses in the emergency department are vital in the health team and must possess high degree of knowledge, skill and experience. The critical care nursing continues to be a unique and challenging specialty. The death forces are always batting in the critical care environment where nurses defend the patient.

Administration of Medication is a basic activity in nursing practice. As a result of the transition from hospitals and institutions to community-based services, an increasing number of nurses are practicing in a variety of settings. Nurses therefore must be knowledgeable about the actual drugs and their administration, client response, drug interactions, client allergies, and related resources. Hence, the researcher felt that, there is a need to conduct teaching programme on emergency drugs to improve and update nurse’s knowledge, in order to minimize or prevent occurrences of medication errors and increase patient safety.
### Problem Statement

'A study to assess the effectiveness of planned teaching programme (PTP) on knowledge of emergency drugs among staff nurses working in critical care units in selected hospitals at Mangalore.'

### Objectives of the study

1. To assess the existing knowledge on emergency drugs among the staff nurses by using structured knowledge questionnaire.
2. To administer Planned Teaching Programme on emergency drugs.
3. To find the effectiveness of Planned Teaching Programme by using same structured knowledge questionnaire.
4. To find out the association between the pre-test knowledge Scores and selected demographic variables such as age, gender, etc.

### The Review of literature is organized under the following headings-

1. Literature related to nurses knowledge on emergency drugs and medication administration
2. Literature related to Medication errors
3. Literature related to planned teaching programme

### Material & Method

An evaluative approach with one group pre-test post-test design was used for the study. The sample consisted of 30 staff nurses, selected by convenient sampling method. Data was collected by administering structured knowledge questionnaire on emergency drugs. After collecting base line data and pre-test, Planned teaching programme was given to the respondents and on the 7th day post-test was conducted using the same questionnaire. The collected data was analyzed by using descriptive and inferential statistics.

### Results

- **Percentage description of demographic variables of staff nurses**
  - Percentage distribution of staff nurses according to their age in completed years shows that, the highest 80% of the respondents were in the age group, 21-25 years & lowest 3.33% of respondents were between age group of 31-35 years and none of respondents from 36 years and above.
  
- **Distribution of staff nurses with respect to their gender shows,** 70% of the respondents were females and 30% of the respondents were males.
  - Percentage distribution of staff nurses according to their experience in completed years shows that, the highest percentage 33.33% of the respondents were in the experience between ≥6 months to 1 year and also experience of 10% of respondents were more than 5 years.
  - Percentage distribution of staff nurses reveals that, 46.67% of respondents were undergone in service education and 53.33% of respondents were not undergone in service education.
  - Percentage distribution of staff nurses reveals that, 30% of respondents were undergone critical care training and 70% of respondents were not undergone critical care training.
- **Assessment of the level of knowledge on emergency drugs among staff nurses working in CCU**
  - Finding reveals that, majority of respondents 70% had only average knowledge whose percentage of score ranged between (35-70). Only 10% of the respondents had good knowledge (70-100) and 20% of the respondents had poor knowledge (0-35) regarding emergency drugs.
Table 12.1: Pre-test and post-test score on emergency drugs among staff nurses

<table>
<thead>
<tr>
<th>Area</th>
<th>Max. Score</th>
<th>Respondents Knowledge</th>
<th>Paired 't' Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean (Mean)</td>
<td>Mean SD</td>
</tr>
<tr>
<td>Pre-test</td>
<td>50</td>
<td>26.0</td>
<td>52 6.93</td>
</tr>
<tr>
<td>Post-test</td>
<td>50</td>
<td>43.87</td>
<td>87.73 4.13</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>50</td>
<td>17.87</td>
<td>35.73 2.80</td>
</tr>
</tbody>
</table>

The knowledge score of staff nurses on emergency drugs in pre-test and post-test which reveals that, post-test mean knowledge score found higher 87.73%(43.67) and SD of 4.13, when compared with pre-test mean knowledge score value which was 52%(26) with SD of 6.98. The mean effectiveness score was 35.73% with SD of 2.80

- **Area wise analysis of pre-test knowledge scores of staff nurses on emergency drugs**

Area-wise highest mean percentage of knowledge scores in pre-test was 64.17% in the area of ‘morphine sulfate’ with mean and SD 2.57 ± 0.97. The least mean percentage of knowledge score in pre-test was 44.66% in the area of ‘general’ with mean and SD 0.93 ± 0.74. Area-wise highest mean percentage of knowledge scores in post-test was 93.33% in the area of ‘general’ with mean and SD 1.87 ± 0.35. The least mean percentage of knowledge score in post-test was 85% in the area of ‘dopamine hydrochloride’ with mean and SD 3.4 ± 0.56.

- **Quartile distribution of the pre-test and post-test scores of staff nurses on emergency drugs**

The data presented in the form of Ogive shows significant difference between pre-test and post-test knowledge scores. The pre-test median score is 26; where as post-test median score is 43. The plotted ogives shows that, the first quartile score of the post-test is higher than the third quartile score of the pre-test and there is a large gap between all the quartiles of pre-test and post-test score. It reveals that, there is a significant increase in the knowledge of staff nurses after administration of PTP. Hence, a finding shows the effectiveness of PTP

- **Association between pre-test knowledge scores and demographic variables**

Chi-square test was done to analyze the association between pre-test knowledge scores and selected demographic variables. The study findings shows that, there is association between pre-test knowledge score with demographic in-service variable (p<0.05), but there is no association between pre-test knowledge score with demographic variables like age, gender, professional qualification, professional experience and critical care training (p>0.05). Hence, the significant association will be, by enhance, thus the null hypothesis was rejected
Interpretation and conclusion

Finding of the study showed that the knowledge of staff nurses after pre-test and before planned teaching programme was not satisfactory; the planned teaching programme helped them to learn about emergency drugs. The post-test knowledge scores showed significant increase in knowledge. Hence, planned teaching programme is an effective strategy for providing information and improving the knowledge of respondents.

Recommendation

On the basis of finding of the study the following recommendations has been made for the study.

1) The study can be repeated on a larger sample with a control group.

2) A comparative study may be conducted to find out the effectiveness between PTP and SIM regarding same topic.

3) Based on the result of the study, In-service Education programme on emergency drugs can be conducted in the each and every ward or department of the hospital; frequently to update nurse’s knowledge about emergency drugs.

4) An exploratory study may be conducted to identify the knowledge and varies practices of staff nurses on emergency drugs.

5) A similar study can be conducted in other hospital settings.

Bibliography


3. Sr. Lucy Rodrigues, 2004. The nursing activities required to meet the needs of the patients visiting the emergency department. The nursing journal of India Volume-XCV, No- 4; 75-6.


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Editorial Board Member

Constitution Day in India

celebrated every year on 26th of November as the constitution of India was adopted by the Constituent Assembly on 26th of November in the year 1949 and came into force on 26th of January in 1950. Dr. Ambedkar is the Father of Constitution of India. He was the chief architect of the Indian constitution.

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