International Journal of Pharmaceutical Erudition

Research for Present and Next Generation

AUG 2019
Vol: 09 Issue:02
(51-53)
Research Paper

A STUDY TO ASSESS THE EFFECTIVENESS OF A STRUCTURAL TEACHING PROGRAMME ON BIO-MEDICAL WASTE MANAGEMENT AMONG GENERAL NURSING AND MIDWIFERY STUDENTS STUDYING AT GOVERNMENT COLLEGE OF NURSING, CIVIL HOSPITAL, AHMEDABAD, (GUJARAT)

Mustufa U. Mansuri*1, Farzana Mansuri2

1Government College of Nursing, Siddhpur (Gujarat)
2PHC, Mudeti Taluka Idar, Sabarkantha (Gujarat)

Medical care is vital for our life, health and well being, but the waste generated from medical activities can be hazardous. Toxic and even lethal because of their high potential for diseases transmission. The hazardous and toxic part of waste from health care establishment comprising infectious, bio-medical and radio-active material. With better planning and management, not only the waste generation is reduced but overall expenditure on waste management can be controlled.1 To assess the knowledge and practice on Bio-medical waste management before and after administration of planned teaching programme for general nursing and midwifery student studying in civil hospital, Ahmedabad. To find out the co-relation between knowledge and practice of bio-medical waste management (BMW). In the present study the investigator selected quasi-experimental research approach, single group pre-test and post-test design. 40 students of 2nd year GNM of civil hospital Ahmedabad selected by random sampling. A structured checklist was used before and after planned teaching programme. Findings revealed that highest percentages (96%) were in the age group of 21-24 years, and majority (90%) were female participant. Study findings revealed that after conducting planned teaching programme knowledge and practice score of the sample show marked increase, which indicate that the planned teaching programme is effective in increasing the knowledge of the sample regarding BMW.

Key word: Bio-medical waste, management, teaching, knowledge, practice.

INTRODUCTION

Medical care is vital for our life, health, and well being, but the waste generated from medical activities can be hazardous, toxic and even lethal because of their high potential for disease transmission. The hazardous and toxic parts of waste from health care establishment comprising infectious, bio medical and radioactive material as well as sharps (hypodermic needles, knives, scalpels etc.) constitutes a grave risk, if this are not properly treated/disposed or is allowed to get mixed with other municipal waste. Its propensity to encourage growth of various pathogen and vector and its ability to contaminate other nonhazardous/non-toxics municipal jeopardizes the efforts undertaken for overall municipal waste management.1

Bio-Medical Waste’ defined as a any solid and or liquid waste including its container and any intermediate product, which is generated during the diagnosis, treatment or immunization of human beings or animals or in
research pertaining to or in the production or testing thereof. The physio-chemical and biological nature of this component, that toxicity and potential hazardous different, necessitating different method option for their treatment disposal. Since majority of the health care establishment are located within the municipal area, their waste management naturally has a close linkage with municipal system. At the same time the civic authority is responsible for public health in the municipal area therefore the health care establishment must have a clear understanding with the municipality regarding sharing of responsibilities associated with the issue. About three forth total hospitals waste is not hazardous infected (provided strict segregation is practiced) and can even be taken care of by municipal waste. Such practices of strict and carefully segregation would reduce the load and cost of management actually hazardous and infected bio-medical.

Objectives of the Study

1. To assess the knowledge on Bio-medical waste management before and after administration of planned teaching programme for general nursing and midwifery student studying in government college of nursing, civil hospital, Ahmedabad.
2. To find out the co-relation between knowledge and practice of bio-medical waste management of general nursing and midwifery students.

Material and Methods

The study is to be assessing knowledge of GNM students regarding bio-medical waste management in civil hospital, Ahmedabad. Research design selected for the present study was one group pre test and post test design. The investigator developed the structured knowledge checklist for evaluation of pre test

Table 1. Range, mean, median, mean difference, standard deviation, standard deviation error, degree of freedom and calculated and tabulated 't' value of knowledge score of sample regarding Bio-medical waste management.

<table>
<thead>
<tr>
<th>Practice score</th>
<th>Mean</th>
<th>Mean difference</th>
<th>S.D</th>
<th>S.E. error</th>
<th>D.F</th>
<th>Calculated 't' value</th>
<th>Tabulated 't' value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- test</td>
<td>13.88</td>
<td></td>
<td>2.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post - test</td>
<td>21.85</td>
<td>7.97</td>
<td>1.97</td>
<td>0.715</td>
<td>39</td>
<td>19.34</td>
<td>1.69</td>
</tr>
</tbody>
</table>

('T' value is observed at 0.05 level of significance), N=40
and post test knowledge respectively. Planned programmed teaching was conducted before post test. Sample of 40 students were selected randomly from 2\textsuperscript{nd} year GNM student. A structured checklist was used. The checklist comprises of two sections. Section A consist socio demographic variable and Section B consists question related to knowledge of BMW. The data was analyzed by using descriptive and inferential statistics.\textsuperscript{2}

RESULTS

Findings revealed that highest percentages (96\%) were in the age group of 21-24 years, and majority (90\%) was female participant. Majority of sample (70\%) doesn’t participate in any training related to BMW. Data presented in this table show that the sample had a significant higher knowledge score in the post test that in the pre-test,‘t= 19.34 at 0.05 level. So the research assumption was accepted indicating that the planned teaching programme on bio medical waste management for sample was effective in enhancing the knowledge score of sample exposed to biomedical waste management.\textsuperscript{4}

CONCLUSION

Form all the above findings, it can be concluded that the samples had good or average knowledge and practice about biomedical waste management. After administration of planned teaching programme, knowledge of samples increased and resulted in a higher knowledge score. This clearly indicates that the planned teaching programme was effective in improving the knowledge of the samples.

REFERENCE