

## **A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF STUDENT NURSES REGARDING BIOMEDICAL WASTE MANAGEMENT IN SELECTED SCHOOL OF NURSING KANPUR (U.P)**

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### **Abstract**

Medical care is vital for our life and health but the waste generated from medical activities represents a real problem of living nature & human world. Improper management of waste generated in health care facilities cause a direct health impact on the community, the health care workers and on the environment every day relatively large amount of potentially infectious and hazardous waste are generated in health care hospitals and facilities around the world. Biomedical waste management has recently emerged as an issue of major concern of hepatitis, nursing homes authorities but also to the environment. Primary objective of this study is to assess the knowledge of the student nurses regarding the biomedical waste management in selected school of nursing, Kanpur. **Methodology-** quantitative research approach was used. The research design was descriptive. The population was General nursing and midwifery students and sample consist of 60 general nursing and midwifery 3<sup>rd</sup> year students of LLR school of nursing. **Result** there was no significant association between the knowledge of student nurses regarding biomedical waste management.

**Key words** – Assess, knowledge, Student nurses, Biomedical waste management

**Introduction** –Hospital waste management is ongoing problem for many countries, especially hospital waste. This type of waste has a bad effect on the environment by contaminating land, air and water resources. Hospital wastes are categories according to their weight, density and constituents. W.H.O has classified medical waste in to different categories these are infectious, sharp, pharmaceuticals, radioactive etc. medical care is vital for our life and health but waste generated from medical activities represent a real problem of living nature and human world. Improper management of waste generated in health care facilities cause a direct health impact on the community. The health care workers on the environment every day relatively large amount of potentially infectious and hazardous waste are generated in health care hospitals. Approximately 1.45 kg waste is generated per patient per day in Indian hospitals it is high as 4.5 kg in developed countries. out of this 15-20% is hazardous. proper management of waste is very important because poor management of waste effects on human health and the environment. In India biomedical waste rules 1998 & further amendment were passed for the regulation of bio- medical waste management. Each state population control committee will be responsible for implementing new legislation. In India there are number of different disposal methods. Yet most are harmful rather than helpful..If body fluid present material need to be incinerated or put in to autoclave this is the proper method and some of medical facilities fails to follow the regulation. GNM students should have awareness regarding bio-medical waste management and also will help the authorities to develop the strategy for improving the situation

**Purpose –**

1. To assess the knowledge of students nurses regarding the biomedical waste management
2. To find out association between knowledge score of student nurses regarding biomedical waste management with selected demographic variables.

**Methodology**

In this study quantitative research approach is used The research designed was descriptive design, The population of the study was nurses students. In this study 80 samples were selected using convenient sampling technique. In this study independent variable is nurse's students and dependent variables is knowledge nurses, setting for the study selected school of nursing Kanpur, the investigator taken permission from concerned authority, the written consent was obtained from samples, the tool were demographic variables and Self structure questionnaire was used for data collection, tool was constructed after consultation of nursing experts. Validity and reliability of tool was done and checked by test retest method. Data coded and tabulated for result analysis.

**Result and discussion**

Table 1 Frequency and percentage distribution of student's nurses about knowledge regarding Biomedical waste management.

Assessment of student's knowledge	Range of score	Frequency	Percentage
Excellent	24-30	22	27.5
Very good	16-21	24	30
Good	10-15	18	22.5
Average	Below 09	16	20

The majority of 30% samples have very good knowledge regarding biomedical waste management, 27.5% students have excellent knowledge 22.5 % have good knowledge and 20% have average knowledge regarding biomedical waste management.

Table 2 Mean, median, mode and standard deviation of knowledge of the students.

Obtained score range	Mean	Median	Mode	Standard deviation
16-21	21.7	12.27	27	1.77

The mean knowledge of students is 21.7 median value 12.27, mode value is 27 and standard deviation is 1.77 which indicate that most of the students have very good knowledge regarding bio-medical waste management.

**Implications**

The finding of the study has several implication which are discussed in three areas.

1. Nursing education
2. Nursing service
3. Nursing administration

**Recommendations**

1. The study can be done on a larger sample of health care workers to generalized the findings.
2. The study can be conducted in different settings.
3. The study can be done to assess the knowledge, practice & attitude of the health care workers.
4. The study can be done among student nurses of clinical nurses

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