

Assess the knowledge regarding segregation of biomedical waste among class IV workers in tertiary care hospital at Nellore, Andhra Pradesh

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Abstract

Background: The waste produced in the course of health care activities carries a higher potential for infection and injury than any other of waste. Therefore it is essential to have safe and reliable method for its handling.

Aims: Assess the knowledge regarding segregation of bio medical waste among class IV workers

Methods and Materials: The present cross sectional descriptive study was conducted in General wards and ICU's of Narayana Medical College hospital. 30 class IV workers were selected by non probability convenience sampling technique. Data was collected by using structured questionnaire. Analysis was performed by using descriptive and inferential statistics.

Results: The results revealed that 50% of class IV workers are having Moderately Adequate knowledge followed by 43.43% are having inadequate knowledge and only 6.67% had adequate knowledge regarding segregation of bio medical waste in the hospital.

Conclusion: The study findings concluded that majority of class IV workers had moderately adequate and inadequate knowledge regarding bio medical waste management. It indicates that there is a need to implement standard protocols and written policies regarding bio medical waste management and further need to disseminate the information to the health care team members through continuous education programs.

Keywords: knowledge, segregation of biomedical waste, class iv workers

Introduction

Biomedical waste is procreate during the diagnosis, treatment, immunization of human beings or animals or in research activities concern to this or in the production or testing of biologicals.¹ The management of bio medical waste in INDIA is still in beginning stage. Inadequate and inappropriate handling of health care waste may have serious public health consequences and a significant impact on environment.² According to World health organization reports that 85% of hospital wastes are actually non-dangerous, whereas 10% are infectious and 5% are non-infectious but they are included in hazardous wastes and about 15% to 35% of Hospital waste is regulated as infectious waste. This range is dependent on the total amount of waste generated.³ Appropriate management of health care waste is a crucial component of environment health protection and it should become an integral feature of health care services. In India the quantum of waste is estimated to be 1 to 2 kg/day/.stagnation of waste may leads to hazardous diseases to health care team members.⁴ This prime responsibility of health care team members in hospital. Poor management of health care waste may leads to the dangerous infectious diseases among the health care team members. Class IV workers are potential exposure to various pathogens and most of them are suffering with a splash exposure or a needle stick injury.^{5,6} Hence the study was carried out to identifying the knowledge of IV class workers regarding segregation of bio medical waste management.

Objectives

1. To assess the level of knowledge regarding segregation of bio medical waste among class IV workers.
2. To associate the level of knowledge regarding segregation of bio medical waste among class IV workers with their socio demo graphic variables.

Materials and methods

Quantitative approach and cross sectional descriptive design was adopted for the study. 30 class IV workers in Narayana Medical College hospital were selected by using non probability convenience sampling technique. After obtaining informed consent from participants the data was collected by using the structured questionnaire. Finally data was analyzed by using both descriptive and inferential statistics.

Criteria for sample selection

Inclusion criteria: class IV workers

Working in General wards and ICU'S in Narayana Medical College Hospital at Nellore.

Both male and female class IV workers.

Exclusion criteria

Not willing to participate in the study

Who are on leave during data collection?

Description of the Tool

The tool was developed with the help of related literature

from various text books, journals, website, discussion and guidance from experts.

Part-I: Consists of Age, Gender, Religion, Educational Qualification, Family Income, Experience, Working Area, Sources of Information.

Part-II: Consists of structured questionnaire to assess the

knowledge regarding segregation of bio medical waste among class IV workers.

Plan for Data Analysis

The data was analyzed in terms of objectives of the study using descriptive and inferential statistics.

Table 1

S. No.	Data Analysis	Method	Remarks
1	Descriptive Statistics	Frequency, Percentage distribution, Mean and Standard Deviation	To assess the knowledge regarding segregation of bio medical waste among class IV workers.
2	Inferential statistics	Chi-Square	To associate level knowledge regarding segregation of bio medical waste among class IV workers with their socio demographic variables

Results

The data were organized and presented under the following Headings.

Section-I

Frequency and percentage distribution of Socio demographic variables of class IV workers

Section-II

Level of knowledge regarding segregation of bio medical waste among class IV workers

Section-III

Mean and standard deviation of level of knowledge regarding segregation of bio medical waste among class IV workers

Section-IV

Association between the levels of knowledge regarding segregation of bio medical waste among class IV workers

with their selected socio demographic variables.

Section-I

Frequency and Percentage Distribution of Socio Demographic Variables among Working Women

Majority of class IV workers with respect to age 9(30%) are between 21-30years of age and with regard to gender 21 (70%) are females, in relation to education qualification 20(66.6%) are illiterate, and with context to experience 11(36%)are 1-3 years, with respect to family income 26 (86.6%)are rs.4001/- to Rs. 6000 income, and with regard to working area 7(23.3%)are working in ICU, in reference to sources of information 16(53.4%) got training regarding biomedical waste management.

Section-II

Percentage distribution based on the level of knowledge regarding segregation of bio medical waste among class IV workers.

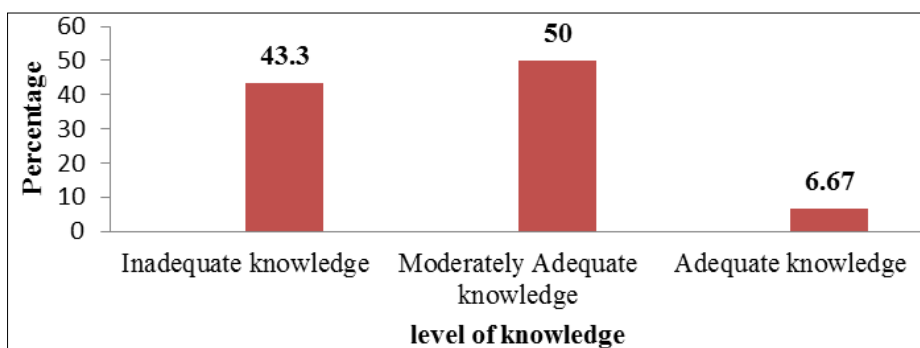


Fig 1: Percentage Distribution of Level of Knowledge

Section-III: Mean and standard deviation of knowledge scores regarding segregation of bio medical waste among class IV workers.

Table: 2

Category	Mean	Standard deviation
Level of knowledge	17.3	3.73

Section-IV

Association between the levels of knowledge regarding segregation of bio medical waste among class IV workers

with socio demographic Variables.

The study finding reveals that there is an association between the levels of knowledge with socio demographic variables such working area obtained calculated value 24.37 table value 21.03 and remaining variables has shown non significant association.

Conclusion

The knowledge levels found to be low among class IV workers. There is a need for a special focus on health care team members to educate regarding the handling of

bio medical waste in the hospital to enhance their knowledge. Hence can reduce the effect of infectious diseases to the health care personnel.

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