

Evaluation of Biomedical Medical Waste Management in a Tertiary Care Hospital, Karad.

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ABSTRACT

A quantitative evaluative approach with pre-experimental one group pre-test post-test design was used to in present study. The study was conducted at tertiary care hospital. Biomedical waste management practices were observed on 120 health care staffs. ‘Training Program’ on practices of biomedical waste management was intervened and post-test practice score was observed.

This Study aimed to assess the knowledge of health team members on biomedical waste management before and after intervention and also to determine the relationship between pretest and posttest knowledge. The study concluded that theKnowledge and practice of healthcare workers about biomedical waste management is improved after giving structured teaching program.

INTRODUCTION

According to Biomedical Waste (Management and Handling) Rules, 1998 of India, “Any waste which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals is considered biomedical waste management. Preventing Infection and promoting health of people is the ultimate goal in every health care setting. Management of waste produced during health care is an integral part of hospital hygiene and infection control. Unsolicited constituents waste is considered as a reservoir of pathogenic microorganisms, which may source contamination and surge in infection rates

AIM

This study aims to

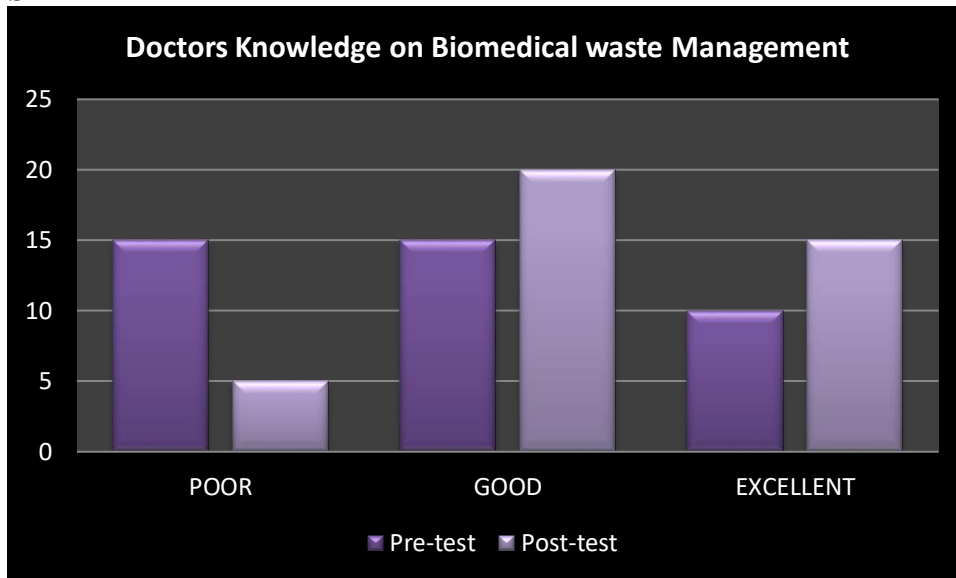
- Assess the knowledge of health team members on biomedical waste management before intervention.
- To evaluate the effectiveness of structured teaching program on biomedical waste and prevention on biomedical waste and prevention of health hazards in it among health team members.
- To determine the relationship between (a) pretest knowledge regarding prevention of health hazards in biomedical wastages, (b) Posttest knowledge regarding prevention of health hazards in biomedical wastages.

MATERIALS AND METHODS

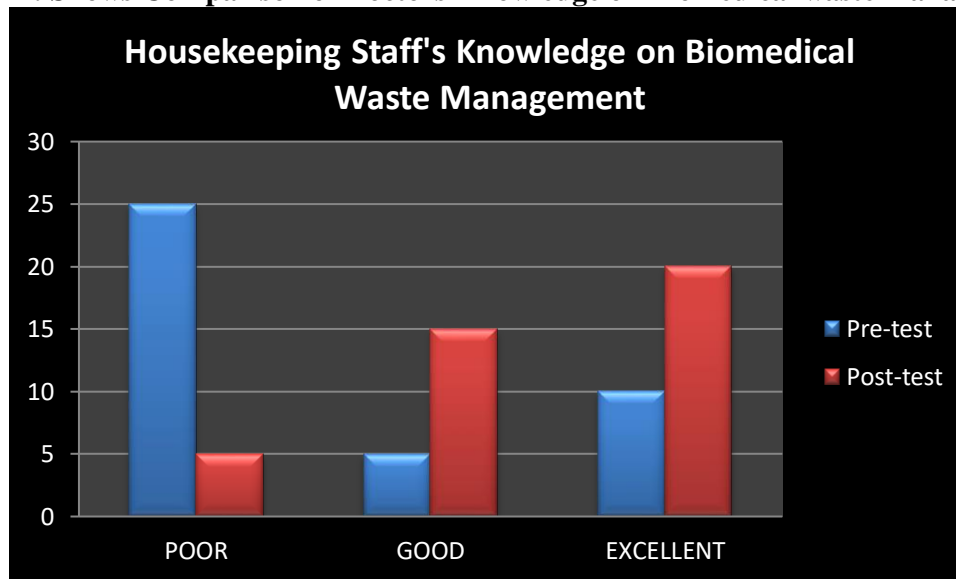
A quantitative evaluative approach with pre-experimental one group pre-test post-test design was used in present study. The study was conducted at Tertiary Care Hospital with a sample size of 120. A structured questionnaire was developed to assess the effectiveness of training programme on bio medical waste management. The questionnaire consisted of three parts. The first part deals with demographic depiction of participants such as gender, age, years of working with hospital. Second part deals with level of knowledge measured by a questionnaire prepared on the basis of various training related factors like the definition and meaning of waste, categories of waste, classification, process of waste management and keeping the waste in different bins etc. The

third part of the questionnaire deals with evaluation of training programme measured on a five point Likert's scale with categories such as excellent, very good, good, fair and poor

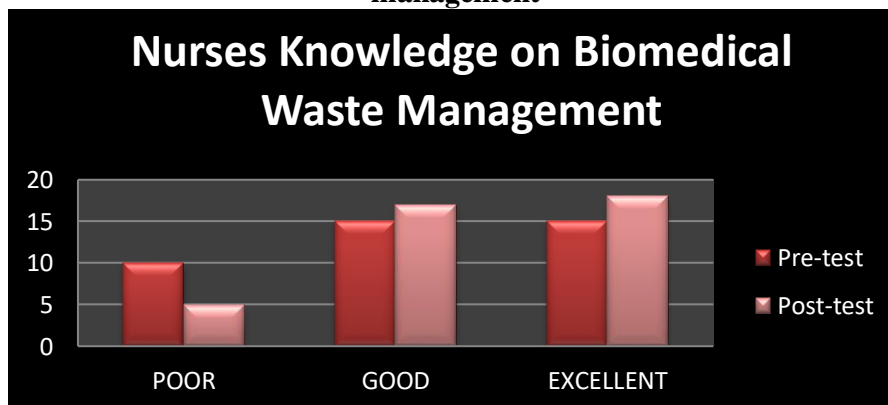
RESULTS



Graph 1: Shows Comparison of Doctors Knowledge on Biomedical waste management



Graph 2: Comparison of Housekeeping staff's Knowledge on Biomedical waste management



Graph 3: Shows Comparison of Nurses Knowledge on Biomedical waste management

DEMOGRAPHIC VARIABLES

Age wise distribution of participants. In age group of 21-25 yrs there were 20 participants, in age group of 26-30 yrs there were 30 participants, in age group of 31-35 yrs there were 40 participants, in age group of above 36 yrs there were 30 participants. Health Care Workers distribution of participants. There were 40 Doctors, 40 Nurses and 40 Housekeeping Staff's taken for study. Working experience wise distribution of participants. In 0-5yrs experience group of there were 10 participants, In 5-10yrs experience group of there were 40 participants, In 10-15yrs experience group of there were 30 participants, In more than 15 yrs experience group of there were 40 participants. Current working place wise distribution of Health Care Workers. There were 34% participants from ICU, There were 33% participants from WARD, There were 33% participants from OPD.

Nursing research

- Surprise auditing of practices of health workers regarding infection control practices may reflect the current practice standard and expose the lacuna in such practices.
- Evaluation of practices will provide valuable data which will be helpful to improve the practice

Recommendations

- A similar study may be replicated on a large sample covering the entire nursing personnel who are working in a labor room and all the procedures related to infection control can be observed
- A true experimental study may be carried out with a control group.
- The study can be extended to find out the effectiveness of a training Programmed/guidelines on rate of infection in patients (patient prognosis or HAI as an outcome variable)
- Infrastructure of units can be modified for proper storage and disposal of waste.

CONCLUSION:-

The segregation of waste at source is the key step and reduction, reuse and recycling should be considered in an appropriate standpoint. The study concluded that the Knowledge and practice of healthcare workers about biomedical waste management is improved after giving structured teaching program.

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