

CHAPTER: 07

TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICES OF BIO-MEDICAL WASTE MANAGEMENT AMONG MEDICAL AND HOUSEKEEPING STAFF

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INTRODUCTION

In pursuit of the goal to reduce health problems, eliminate potential risks, and treat individuals with illnesses, healthcare services inherently generate waste that may pose hazards to health. Waste generated during healthcare activities poses a greater risk of infection and injury compared to other waste types. Inadequate knowledge and improper handling of healthcare waste can lead to severe health consequences and have substantial environmental impacts. Annually, India generates around 0.33 million tons of hospital waste, with a waste generation rate ranging from 0.5 to 2.0 kg per bed per day [1]. Regardless of its origin, adopting a safe and reliable method for managing biomedical waste is crucial. Proper biomedical waste management is not only a legal obligation but also a social responsibility. Despite existing legal provisions, such as the Biomedical Waste (Management and Handling) Rules of 1998 [2], aimed at mitigating the impact of hazardous and infectious hospital waste on the community, complete implementation of these provisions remains elusive. Critical issues associated with healthcare waste include the absence of proper waste management, insufficient awareness about health hazards from biomedical waste, inadequate financial and human resources, and poor control of waste disposal [3]. The hazardous impact of medical waste on the public and the environment significantly increases without appropriate handling. Hospital waste management has far-reaching implications, affecting the health of patients, healthcare workers (doctors, nurses, sanitary staff, etc.), and the general public. Despite increased global awareness among health professionals about hazards and appropriate management techniques, the level of awareness in India is considered inadequate [4-5].

RESEARCH OBJECTIVES

1. To assess the KAP of BMW management among medical and housekeeping staff.
2. To identify the existing lacunae and problems in management of Biomedical Waste.

RESEARCH METHODOLOGY

The research was conducted at Aster Medcity in Kochi, with a study duration spanning from March 1, 2016, to May 15, 2016. The study adopted a descriptive and analytical design to investigate various aspects of the healthcare environment. The sampling strategy employed convenience sampling, a non-probability method, to select 25 housekeeping staff, 46 nursing staff, and 20 doctors as participants for questionnaire-based feedback and interviews. Data collection tools included a structured questionnaire, one-to-one interviews, and a comparative analysis. The research also incorporated statistical analysis to derive meaningful insights from the collected information. This methodology aimed to comprehensively assess the perspectives of housekeeping staff, nursing staff, and doctors at Aster Medcity in Kochi, providing valuable insights into the healthcare environment during the specified study period.

RESULTS & DISCUSSION

Concerning the existing practices of biomedical waste management, it was observed that 92.7% of the staff had received training in this domain, yet only 80% expressed a willingness to attend training sessions again. A significant percentage, 97.33%, of the staff was cognizant of the risks associated with biomedical waste. Regarding the biomedical waste (BMW) plan, 100% of the staff was aware of it, but only 44.6% were well-versed in the proper segregation of biomedical waste. In general, approximately 86% of the staff was knowledgeable about the legislation related to BMW, with only 23.3% familiar with environmental pollution laws. Only 51% of the staff was informed about the different waste categories. Notably, over 97.66% of the staff was aware of the storage of biomedical waste, while only 35.4% were informed about the end treatment of the waste. According to 68.33% of the staff, safe management was not an issue at all, and 81.66% believed the safety of waste handlers was crucial. When asked whether handling waste was an additional burden to their work, only 11.6% felt this way, while the rest considered it a daily routine practice that should be followed. All staff members were aware of the registers and color codes maintained for

daily biomedical waste entry and disposal, and 100% were knowledgeable about the biohazard symbol labeled on bags. On the other hand, about 86% were familiar with the discarding of waste in color-coded bags.

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