

ABSTRACT

Background:

Healthcare institutions are continuing to face diversified difficulties in order to improve their healthcare solid waste management at the institutional level and many initiatives taken by the Ministry of Health. Assessing the factors influencing on healthcare solid waste management at an institutional level is a timely necessity. The evidence generated will pave the way for improvement of healthcare solid waste management in hospitals.

Objectives:

The study was conducted to assess the factors influencing on healthcare solid waste management in Type-A Base Hospitals at the Kalmunai RDHS region.

Methodology:

A descriptive cross-sectional study was carried out among Type-A Base Hospitals situated in the Kalmunai RDHS region. The study population was all Type-A Base Hospitals situated in the Kalmunai RDHS region and nursing officers who had completed 6 or more months of working periods at the same hospitals. A self-administrated questionnaire was used to assess the knowledge and attitude of nursing officers. A check list was used to assess the healthcare solid waste management practices, availability of infrastructure and human resource allocation.

Results:

The median of a nursing officer's knowledge and attitude was 80 or above in the study settings. There was a statistically significant difference between the median knowledge score in all four hospitals (Kruskal-Wail's test $p=0.01$). Statistical significance of attitude score was found only between gender ($p=0.04$). The mean generation of total waste was nearly 31,000 kg per month in Type-A BHs in the Kalmunai RDHS region. The overall composition of non-hazardous and hazardous waste was nearly 60:40. All hospitals were at a satisfactory level in both the healthcare solid waste management practices and the availability of infrastructure, except Base Hospital Sammanthurai. Insourced human resource (doctors, nursing officers and health assistants) allocation was in an unsatisfactory level in all hospital except Base Hospital Akkaraipattu. However, the outsourced human resource (janitorial staff) allocation was in a satisfactory level in all hospitals except Base Hospital Sammanthurai. The only Base Hospital Sammanthurai governed by the provincial ministry has no onsite incinerator or MetaMizer.

Conclusion:

This study discovered that HCSWM practices (generation, segregation, transportation, disposal, monitoring and evaluation), infrastructure, and HR allocation have influenced on HCSWM. There was gap in knowledge of nursing officers in between all four hospitals.

Recommendations:

This study recommends that in all four Type-A Base Hospitals in the Kalmunai RDHS region, the allocation of human resources for waste management should be increased and also, capacity building and motivational training programs are essential to improve the knowledge and attitude on HCSWM. Furthermore,

necessary actions should be taken to reduce the amount of food waste generation and fund should be allocated for improving the infrastructure of HCSWM.

Key word: Healthcare solid waste management, practice, human resource, infrastructure, hazardous waste.