

Abstract

Sound management of HCW is a crucial component of environmental health protection. Identifying the risk associated and necessity of proper management of HCW, in 1992 the United Nations Conference on the Environment and Development (UNCED) recommended a set of measures for waste management. Each country is supposed to develop and manage their HCW according to a national management plan. The Heads of healthcare establishments are responsible for health protection and safety at the workplace and are legally responsible for the safe disposal of health care waste generated in their establishments.

It has been identified that, the current HCWM situation in Sri Lanka needs drastic improvement in order to reduce the direct and indirect health impacts to health care personnel as well as communities. HCWM plans have been implemented in the central and provincial health facilities of the country. These facilities have been provided with technical advice and adequate materials, and sufficient financial and human resources.

The objective of the study was to evaluate the HCWM process by describing the knowledge attitude and behaviors of nursing officers and by assessing the facilities available within the ward settings for HCWM in the Base Hospitals of Colombo District. Information on knowledge attitude and behaviors were obtained by self administered questionnaire to nursing officers. The evaluation of available facilities were done assessing specific practices related to HCWM in the hospital as ward levels using an observation check list.

The study recorded a response rate of 95.6%. Almost all participants (97.8%) were females. Even though majority (57.9%) had more than 10 years working experience in health sector, only 36.9% have received in service training in HCWM.

Overall knowledge regarding HCWM was found to be 'poor' among approximately half (59.5%) nursing officers. However, knowledge levels of study population in relation to specific areas of HCWM were found to be 'good' as proportions of study population categorized as having 'good' knowledge in these specific areas were high (colour coded segregation (91.8%), infectious waste management (72.9%) and sharp waste management(80.2%)). The proportions of study population with 'good' knowledge in relation to legal frame work(0%), preparing bleaching solution (13.4%) ,

final disposal of pathological waste (18%) and knowledge of incinerator as environmentally healthy method (36.6%) were low.

A great majority (85.7%) of study population had favorable overall attitudes regarding HCWM. Behavior levels relevant to colour coded segregation (95.7%), infectious waste management (78.7%) and sharp waste management (82.5%) were 'good' among the population. Only 30% were practicing recycling. Higher knowledge in relation to infectious waste management was significantly associated with better practices related to infectious waste management ($\chi^2=9.19$, df 1, p 0.002)

Majority (68.3%) accepted they are getting proper guidance from their superiors relevant to HCWM. The main obstacle to proper HCWM reported by 57.7% study population was problems associated with human resources.

Regarding the evaluation of measures available for HCWM, almost all the aspects of HCWM observed (segregation, storage, internal transport and final treatment) were not up to the recommended standards in either institute.

Regular in-service training programs to bridge the identified knowledge gap, to sustain the favorable attitudes and further improvement in behaviours related to HCWM were recommended. Development of detailed HCWM plan according to the institutional needs to up grade the segregation, storage, internal transport and final treatment was also recommended.

