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**SURVEY ON THE DISPOSAL OF HEALTH-CARE WASTE IN THE
COLOMBO DISTRICT AND A PROPOSAL FOR IMPROVING THE
DISPOSAL MECHANISM**

A PROJECT REPORT PRESENTED BY

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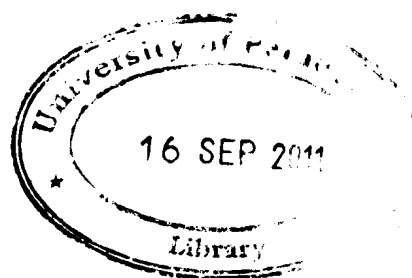
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Though healthcare services aim to reduce the health problems and prevent the potential risks to the health of a community, these services create wastes which are considered as hazardous materials due to its high potential of causing infection and injury if contacted. Therefore, healthcare waste management today is considered as an integral part of healthcare services, as it can create harm through inadequate waste management; thus reducing the overall benefits provided by healthcare centers. In this study, a survey for Healthcare Waste Management was undertaken during the month of February to July 2010, at all government healthcare facilities in Colombo district. Survey included examining the current status of Healthcare Waste (HCW) generation, segregation, transportation, treatment and disposal practices adopted by the hospitals and proposal for improving the disposal mechanism.

The study assessed HCW management practices of 23 government hospitals under the two groups namely A & B. Group A hospitals ranged daily bed occupancy greater than 300 and availability of specific treatment facilities such as operation theater/s, radiotherapy, testing laboratory, intensive care & blood bank, wards & clinics and Group B hospitals ranged daily occupancy less than 300 and treatment services available limited to OPD, dental unit, isolation ward, wards & clinics.

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Collected data analyzed under the two groups and results show that, the way of HCW segregation of all hospitals should be further improved based on the Bio-Medical waste (Handling and Management) Rules lay down by the Ministry of Healthcare & Nutrition in 1998. In all the facilities, sharp objects were separated almost completely, but separation of other types of HCW was only done in 10% of the investigated facilities. Regarding the treatment (sterilization) of infectious waste before the final disposal only practiced by 17% of the investigated facilities. In 82% of the hospitals the HCW was disposed of without any treatment.

Burning and burying of medical waste is an unusual practice but common practice among the hospitals investigated. Burning of the healthcare waste in group A, account 60% and group B, it's increased up to 92%. Further result show that there is a significant difference in quantity of daily infectious waste generation between group A & B. Usually higher the amount is marked healthcare facilities in group A (0.30 kg / bed, per day) and lower amount belongs to the healthcare facilities in group B (0.24 kg/ bed, per day). Justifiable reasons is healthcare facilities in group A; facilitate additional specific healthcare treatments for the patients which caused the generating various types as well as higher amount of HCW. Further average daily bed occupancy level of Group A (68 %), is considerably higher than that of the group B (44 %).

Key Words: Healthcare waste, Hazardous material, Sterilization,