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Healthcare Waste Management Practices in Bangladesh: A Case Study in Dhaka City, Bangladesh

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Abstract: Healthcare waste (HCW) is one of the major concerns in environmental issues due to its infectious and hazardous nature that is requires specific treatment and systematic management prior to final disposal. This study aimed to assess HCW management system in Dhaka City (DC), Bangladesh, by investigating the present practices implemented by the city. In this study, five different healthcare establishments were selected in DC. Field visits and interviews with health personnel and staff who are concerned with the waste management were conducted. The information was gathered through questionnaire focus on the different aspect of HCW management like, waste segregation and collection, storage and transport, awareness as well. The results showed that a total of 7,215 kg/day (7.2 ton/day) of waste were generated, of which 79.36% (5.6 ton/day) was non-hazardous waste and 20.6% (1.5 ton/day) was hazardous waste. The rate of waste generation in these healthcare establishments (HCEs) was 2.6 kg/bed/day. There was no appropriate and systematic management of HCWs except at few private HCEs that segregate their hazardous waste. All the surveyed HCEs dumped their HCW together with the municipal waste, and some staff members were also found to be engaged in improper handling of the generated waste. Furthermore, the used sharp instruments, saline bags, blood bags and test tubes were collected for resale or reuse. Nevertheless, the lack of awareness, appropriate policy, regulation and willingness to act, were responsible for the improper management of HCW in DC. There was lack of practical training of concerned healthcare to handle the waste properly, while the nurses and staff were found to be aware of the health impacts of HCW.

Keywords: awareness, disposal, Dhaka city, healthcare waste management, waste generation

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