Management of Medical Waste - a Growing Concern

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Health care facilities, both government and non-government, are increasing day by day in our country. Proportionately more and more medical wastes are being generated. But waste management issue has not got enough attention by the concerned authority. The medical waste can be defined as all waste materials generated at health care facilities such as hospitals, clinics, physician's offices, dental practices, blood banks, and veterinary hospitals/clinics as well as medical research facilities and laboratories¹. Waste produced in the course of health care activities carries a higher potential for infection and injuries than any other type of waste². Approximately 85% of hospital waste are actually non-hazardous, 10% are infectious and around 5% are non-infectious but hazardous². Non infectious hazardous waste includes sharp items, radioactive substances, pharmaceuticals, chemicals, laboratory reagent, etc. Usually these wastes are disposed of in an open dust bin. Scavengers pick up some items for selling and pose a negative impact on health and environment. Proper management and safe disposal of medical waste is vital in the reduction of infection or illness through contact with discarded material and in the prevention of environmental contamination in hospital facilities¹. In most cases the main reason of mismanagement of clinical wastes are the lack of legislation, lack of specialized clinical staffs, lack of awareness and effective control³. Segregation of potentially infectious/hazardous materials from non-hazardous waste at the point of generation may reduce both volume and cost⁴. Illegal segregation and recycling of medical waste is carried out at the final disposal site, therefore there are concern about environmental pollution and transmission of infectious diseases⁵.

Segregation of hazardous from non-hazardous items at the point of generation of waste is very important. Hazardous item may be treated/disposed of in the following ways according to the nature of waste: incineration, autoclaving, chemical treatment, inertization and sanitary landfilling⁶. Non-hazardous item may be dumped on open land followed by final removal by an authorized agency. Training and capacity building program for all employees involved in the management of medical waste is urgently needed. To do no harm is an ethical issue. To develop a safe and sustainable waste management system all over the country, implementation of national medical waste management and processing rules, 2008 as well as the WHO core principles for health care waste management is imperative⁷.

References:

8. WHO core principles for achieving safe and sustainable management of health care waste; developed during the International Health Care Waste meeting hosted by WHO in Geneva on June 20-22, 2007.