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Editorial

Hospital Waste Management- Are We Doing it in the Correct Way?

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Abstract

Both non-hazardous and hazardous waste should be segregated at the point of care using designated bins and dirty-room. Hazardous waste needs to be decontaminated and preferably autoclaved before disposing to landfill site. Governing committee should overview the waste disposal process.

Keywords: Decontamination, Hazardous waste, Hospital

Comment

Hospital waste can be divided into non-hazardous and hazardous waste. Non-hazardous waste comprises of the 80% of total waste coming out of the hospital. The rest of the 20% of waste is the hazardous waste which we are concerned about. The non-hazardous waste is either biodegradable or recyclable and can be handed over to the municipality for disposal as any other household waste. However, every health care facility needs to take extra care about the disposal of the hazardous waste so as to have no impact on the public health as well as the environment; for instance, incineration which produces toxic gases like furans and dioxides which have toxic effect on immune, reproductive and endocrine system.

Every health care facility needs to have a waste management committee which is to be led by the chief of clinical services such as hospital director, medical superintendent or head of the institution. The main objective of this committee is to promulgate a strategy formalizing the commitment of hospital to proper health care waste management (HCWM). This committee also develops the HCWM plan which must include training and written guidelines on waste management addressing it from waste generation to treatment and final disposal. It also implements the HCWM plan, reviews and updates the plans in an annual basis and ensures adequate financial and human resources for the implementation of HCWM plan. The hazardous waste comprises of sharps like needles and scalpel, anatomical wastes like placentas and amputated body parts, laboratory waste, cytotoxic drugs, blood bags etc. The first key for implementation of HCWM is to minimize the waste. This can be done by the doctors and nurses who are in direct contact with the patients. The second important point is to segregate the hospital waste at the point of care. If not segregated properly all the waste falls into bio-hazard category. The bio-hazardous waste needs to be

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kept in the red bin with red bag in the ward, operation rooms and procedure rooms so that the handling of this waste will be minimized. The waste is then stored at the wards’ 'Dirty-rooms' which should not exceed more than 24 hours. Then, the wastes are transported after ensuring that the plastic bags are tightly closed and labeled. These wastes are then taken to the waste disposal unit where it has to undergo the process of sterilization. This is completed by the autoclave process. Once the biodegradable hazardous wastes are sterilized, they can be handed over to the municipality to be taken to landfill site. The whole process of hazardous waste disposal needs to be monitored and evaluated by the hospital waste management committee.

The sharps and needles need to be buried in the special concrete pits dug in the hospital grounds. Similar pits are made for the anatomical waste where lime and soil are poured after each waste which helps in degradation. It has to be ensured that the underlying water tables are not affected by the seeping of the waste material. All the health care facilities need to follow the guidelines of the government to ensure good health, morale and output not only of the workers but also of the general public.

**Conclusion**

Health care waste management is a key part in the functioning of a hospital where care should be taken to dispose the hazardous waste in a proper and scientific manner so as to protect the waste disposal workers, public health and environment. The healthcare workers play an important role in minimizing and segregating the waste at point of care which makes waste disposal system efficient and healthy.

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