

MEDICAL WASTE MANAGEMENT

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Abstract

Medical waste management is crucial because it directly relates to protecting human health and preserving the environment. Medical waste from healthcare facilities, such as hospitals, clinics, and laboratories, often contains infectious materials, sharp objects, and hazardous chemicals that can pose a risk of disease transmission and environmental pollution if not managed properly. Therefore, proper medical waste management, including sorting, collection, transportation, processing, and final disposal, is essential to prevent infection, protect healthcare workers and the public, and maintain a safe and healthy environment. Furthermore, proper medical waste management also supports the creation of a responsible and sustainable healthcare system.

Keywords: Management, Medical Waste

Abstrak

Pengelolaan limbah medis sangat penting karena secara langsung berkaitan dengan perlindungan kesehatan manusia dan pelestarian lingkungan. Limbah medis dari fasilitas kesehatan, seperti rumah sakit, klinik, dan laboratorium, seringkali mengandung bahan infeksius, benda tajam, dan bahan kimia berbahaya yang dapat menimbulkan risiko penularan penyakit dan pencemaran lingkungan jika tidak dikelola dengan benar. Oleh karena itu, pengelolaan limbah medis yang tepat, termasuk pemilahan, pengumpulan, pengangkutan, pengolahan, dan pembuangan akhir, sangat penting untuk mencegah infeksi, melindungi petugas kesehatan dan masyarakat, serta menjaga lingkungan yang aman dan sehat. Selain itu, pengelolaan limbah medis yang tepat juga mendukung terciptanya sistem perawatan kesehatan yang bertanggung jawab dan berkelanjutan.

Kata Kunci: Limbah Medis, Pengelolaan

INTRODUCTION

In the world of health, hospitals or community health centers have a close relationship with environmental issues, a good environment will have a positive impact on the community health center environment and vice versa, a bad environment will have a negative impact on the community health center itself, the negative impact in question is pollution due to poor or inappropriate management of medical and non-medical waste. Various types of medical waste generated from service activities at the Community Health Center can be dangerous and cause health problems, especially during collection, sorting, collection, storage, transportation and destruction as well as final disposal.

According to the World Health Organization (WHO) definition adopted by Chandra in 2006, waste is anything that is not used, not utilized, not liked, or something that is discarded that originates from human activities and does not occur naturally. Medical waste is waste that originates from medical service activities. Various types of medical waste generated from service activities in hospitals or other health facilities such as community health centers can be dangerous and cause health problems (Dionisius, 2015).

Decree of the Ministry of Health of the Republic of Indonesia No. 66 of 2024 states that solid medical waste is solid waste consisting of infectious waste, pathological waste, sharps waste, pharmaceutical waste, cytotoxic waste, chemical waste, radioactive waste, pressurized container waste, and waste with high heavy metal content. Management of solid medical waste in hospitals includes waste reduction, sorting,

containerization, reuse and recycling, collection, transportation and storage of solid medical waste, collection, packaging and transportation outside the hospital, management and destruction.

Increasing awareness of the importance of environmentally friendly waste management is being felt across various sectors, including the healthcare sector. One type of waste that requires special attention is medical waste, which can potentially transmit disease and pollute the environment if not managed properly. Medical waste requires proper handling to avoid health and environmental risks. Therefore, officers and employees must understand the importance of raising awareness regarding waste management to avoid risks to health and the environment.

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According to WHO (2005), in the implementation of medical waste management, the actions of officers are essential, starting from sorting, containerization, transportation, collection, and final disposal. During the waste storage stage, bags must not be full. Waste officers must ensure that bags of the same color are combined and sent to the appropriate location. This is intended to prevent negative waste management impacts on officers, the environment, and the surrounding community (Saghita, et al., 2017).

Improper waste management can be very dangerous for healthcare facility staff and the staff who handle the waste (cleaning staff). Solid medical waste has the potential to transmit infections such as Hepatitis B virus (HBV), Hepatitis C virus (HCV), and Human Immunodeficiency Virus (HIV) to humans. Another impact of medical waste is a decline in environmental quality, resulting in discomfort and aesthetic issues. The appearance of the health center can have a psychological impact on service users, due to the negative impression created by improperly managed waste.

Management of solid medical waste includes waste sorting, collection, on-site transportation, storage with provisions and storage of medical waste for up to 48 hours during the rainy season and 24 hours during the dry season, off-site transportation and then destruction. For management of non-medical solid waste with sorting and container of non-medical solid waste, then collection, storage and transportation and subsequent processing and destruction (Minister of Health Decree, 2004).

Solid medical waste management is influenced by several important factors, one of which is the availability of waste management facilities and equipment. Facilities such as sorting facilities, special containers for infectious waste, and destruction equipment such as incinerators or autoclaves are crucial for effective waste management. If facilities are inadequate, medical waste risks being mixed with general waste, increasing the potential for disease spread and environmental pollution. Furthermore, standardized transportation and temporary storage systems are also crucial to ensure waste does not pose a hazard to healthcare workers or the public.

Another factor influencing solid medical waste management is healthcare workers' knowledge and compliance with waste management procedures. Healthcare workers who understand the procedures for sorting, packaging, and disposing of medical waste are better able to manage waste safely and according to standards. Training, policy dissemination, and supervision from healthcare facility management also significantly improve compliance with applicable procedures. With trained human resources and a robust monitoring system, solid medical waste management can be carried out more effectively, safely, and environmentally friendly.

CONCLUSION

Medical waste management is crucial because it directly relates to protecting human health and preserving the environment. Medical waste from healthcare facilities, such as hospitals, clinics, and laboratories, often contains infectious materials, sharp objects, and hazardous chemicals that can pose a risk of disease transmission and environmental pollution if not managed properly. Therefore, proper medical waste management, including sorting, collection, transportation, processing, and final disposal, is essential to prevent infection, protect healthcare workers and the public, and maintain a safe and healthy environment. Furthermore, proper medical waste management also supports the creation of a responsible and sustainable healthcare system.

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