TRANSPUBLIKA INTERNATIONAL RESEARCH
IN EXACT SCIENCES
(TIRES)
VOLUME 1 ISSUE 4 (2022)

EVALUATION OF COMPLIANCE WITH STANDARDS OF OPERATIONAL PROCEDURES FOR THE MEDICAL WASTE MANAGEMENT SYSTEM OF THE PUSKESMAS PANTE KUYUN, DISTRICT ACEH JAYA

Muhammad Ichsan[1*], Taufiq Karma[2], Ghazi Mauer Idroes[3]
[1,2,3]Occupational Safety and Health Study Program, Faculty of Health Sciences, Abulyatama University, Aceh Besar
E-mail: [1)] ichsanmhd547@gmail.com, [2)] taufiqkarma94@gmail.com,
[3)] idroesghazi_k3@abulyatama.ac.id

Abstract

The public health center in Pante Kuyun, situated in the Setia Bakti district of Aceh Jaya regency, Southeast Aceh, generates various types of medical waste during its operations. Improper management of medical waste can have negative impacts on both the environment and human health. This research aims to assess the current medical waste management practices at the Pante Kuyun public health center. The study utilized a descriptive observation method and revealed that the medical waste at the facility is not being handled in accordance with standard operating procedures. Waste segregation by type is lacking, and there is a lack of plastic bag liners and proper labeling for waste disposal. The findings of this study underscore the importance of implementing proper medical waste management practices at the Pante Kuyun public health center to protect both the environment and human health. Recommendations for improvement include providing staff with training on proper waste handling procedures, ensuring the availability of necessary resources for waste management, and implementing regular monitoring and evaluation of waste management practices at the facility.

Keywords: PHC Pante Kuyun, PHC Medical Waste, Medical Waste Management

1. INTRODUCTION

Community health centers (puskesmas) play a crucial role in advancing health knowledge and delivering essential healthcare services to the community. As a service facility, it is imperative for puskesmas to actively contribute towards maintaining and enhancing a healthy environment, adhering to established standards and requirements (Rahno et al., 2015). Puskesmas is a health service facility that generates both solid and liquid medical waste as well as non-medical waste during its operations (Pratiwi & Maharani, 2013).

Improper management of healthcare waste poses a significant risk of infection and injury, surpassing other forms of waste. Inadequate handling of medical waste can lead to severe health and environmental issues. Puskesmas is tasked with safeguarding public health and the environment, with a particular focus on managing medical waste effectively to promote a healthy environment.

In order to establish a welcoming health center that addresses environmental health issues effectively, it is essential for each health center to have proper sanitation facilities and equipment, including medical waste management systems. The management of medical waste is an integral part of the health service provided at the health centers. It is crucial that medical waste from these centers is handled appropriately, with infectious waste being separated from non-infectious waste. Additionally, every room should be equipped with a durable, lightweight, non-corrosive, waterproof trash can that is easy to clean and lined with plastic bags. These plastic bags should be color-coded to differentiate between different types of infectious waste, with yellow bags designated for infectious waste. Sharp objects and needles should be disposed of in special containers, such as bottles, before being placed in plastic bags. Infectious waste should be disposed of using an incinerator (Nazila, 2017).

Different types of medical waste produced from service activities at puskesmas can pose a risk and lead to health issues, particularly during the processes of collection, sorting, storage, transportation, destruction, and final disposal (Nazila, 2017). In the process of medical waste management, WHO (2005) highlights the importance of officers' involvement from waste storage to incineration. It is imperative that plastic bags are not filled to capacity during the storage phase. Furthermore, officers must segregate bags of the same color during waste collection to facilitate proper disposal. These steps are taken to minimize the negative repercussions of waste management on officers, the environment, and the local community.

The presence of inconsistencies in the management of medical waste at the Pante Kuyun Health Center motivates the author to conduct research endeavors. The research is designed to assess the underlying factors contributing to these inconsistencies within the health center's waste management system by analyzing the current standard operating procedures. The ultimate goal is to provide a basis for enhancing the overall management of medical waste.

2. RESEARCH METHOD

The research was carried out using a descriptive observation research approach, specifically by examining a situation or problem through field observations. The participants in this study were the health staff and cleaning service personnel at the Pante Kuyun Health Center. The analysis of qualitative data was conducted through direct observation in the field.

3. RESULT AND DISCUSSION

Medical waste is produced in various room units at Puskesmas Pante Kuyun, including ugd, delivery room, general poly, dental poly, kia poly, laboratory, medical records, pharmacy, nutrition room, and immunization room. The range of medical waste generated is extensive, consisting of items such as infusion hoses, catheters, urine bags, handscoons, syringes, infusion bottles, masks, vials/ampoules of drugs, used dressings, cotton/bandages contaminated with patient body fluids, lancets, and medications in solid, semi-solid, and liquid forms.

The Pante Kuyun Health Center has established standard operating procedures (SOP) to effectively manage medical waste. The management and disposal of hazardous waste at the

health center involves several steps. Firstly, the officers responsible for handling hazardous waste ensure that there are two closed bins in each service unit that produces such waste. These bins include safety boxes for syringe disposal from the immunization program, closed bins with infectious signs for infectious waste, and closed bins with domestic signs for non-infectious waste.

Furthermore, the officers in the clinical service units carefully separate and handle medical waste based on its type, which includes metal waste, liquid waste, and solid waste. In the case of liquid waste, it is directly disposed of into the sink available in each unit specifically designated for liquid medical waste. These sinks have separate channels to ensure proper disposal. The liquid medical waste then flows into a special reservoir for further management.

Figure 1. Waste Disposal Site in One of The Pante Kuyunmas Pante Kuyun Health Center Room Units

Despite the clear SOP arrangement for medical waste management at the Pante Kuyun Health Center, it has been observed that officers there still fail to handle medical waste properly. During field observations, it was noted that the officers responsible for each room unit dispose of medical waste without proper sorting, resulting in a mixture of all types of waste being wrapped together in plastic. Additionally, the absence of a base in the trash can, along with the lack of markers to distinguish between different types of waste, leads to a situation where infectious medical waste, non-infectious waste, and non-medical waste are all mixed together in the same location.

Figure 2. Waste Disposal Bins in The Lab Room

Figure 3. Waste Disposal Bins in The Emergency Room

Figure 4. Liquid waste disposal site at Pante Kuyun Health Center

This is not only a violation of the existing SOP, but it also has the potential to contaminate the surrounding environment of the health center and pose a risk to both the officers and visitors. The absence of proper facilities, such as insufficient trash bins in each unit, and the careless provision of plastic bags in the trash cans without proper labeling to differentiate the types of waste that can be disposed of, along with the lack of discipline and awareness among the officers regarding the hazards of medical waste, contribute to the improper and incorrect management of medical waste at the Panten Kuyun Health Center.

4. CONCLUSION

The examination of the situation reveals that the management of medical waste at the Pante Kuyun health center does not adhere to the standard operating procedures (SOP). This is primarily due to the absence of essential facilities, such as insufficient trash cans in each unit's room, the absence of a base in the trash cans to differentiate waste types, and the lack of awareness among staff regarding the hazards of medical waste. To enhance discipline and awareness among health and cleaning service personnel, it is imperative to conduct training sessions on proper PHC medical waste management. Additionally, there is a necessity to

enhance the involvement of staff in waste management and ensure regular supervision by the health center's leadership.

REFERENCES

Nazila, N. E. K. A. N. U. R. (2017). *Analisis Pengelolaan Sampah Medis Padat Puskesmas di Kota Malang sebagai Sumber Belajar Biologi*. University of Muhammadiyah Malang.

Pratiwi, D., & Maharani, C. (2013). Pengelolaan limbah medis padat pada puskesmas kabupaten pati. *Jurnal Kesehatan Masyarakat*, *9*(1), 74–84.

Rahno, D., Roebijoso, J., & Leksono, A. S. (2015). Pengelolaan Limbah Medis Padat Di Puskesmas Borong Kabupaten Manggarai Timur Propinsi Nusa Tenggara Timur. *Indonesian Journal of Environment and Sustainable Development*, *6*(1).

WHO. (2005). *Pengelolaan Aman Limbah Layanan Kesehatan. Jakarta: Penerbit Buku Kedokteran EGC.*