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Knowledge and Practices on Waste Disposal Management Among Medical Technology Students at National University – Manila

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Abstract : Waste management is a global concern due to increasing waste production from changing consumption patterns and population growth. Proper waste disposal management is a critical aspect of public health and environmental protection. In the healthcare industry, medical waste is generated in large quantities, and if not disposed of properly, it poses a significant threat to human health and the environment. Efficient waste management conserves natural resources and prevents harm to human health, and implementing an effective waste management system can save human lives. The study aimed to assess the level of awareness and practices on waste disposal management, highlighting the understanding of proper disposal, potential hazards, and environmental implications among Medical Technology students. This would help to provide more recommendations for improving waste management practices in healthcare settings as well as for better waste management practices in educational institutions. From the collected data, a female of 21 years of age stands out among the respondents. With the frequency and percentage of medical technology students' knowledge of laboratory waste management being high, it indicates that all respondents demonstrated a solid understanding of proper disposal methods, regulations, risks, and handling procedures related to laboratory waste. That said, the findings emphasize the significance of education and awareness programs in equipping individuals involved in laboratory practices with the necessary knowledge to handle and dispose of hazardous and infectious waste properly. Most respondents demonstrate positive practices or are highly mannered in laboratory waste management, including proper segregation and disposal in designated containers. However, there are concerns about the occasional mixing of waste types, emphasizing the reiteration of proper waste segregation. Students show a strong commitment to using personal protective equipment and promptly cleaning up spills. Some students admit to improper disposal due to rushing, highlighting the importance of time management and safety prioritization. Overall, students follow protocols for hazardous waste disposal, indicating a responsible approach. The school's waste management system is perceived as adequate, but continuous assessment and improvement are necessary. Encouraging reporting of issues and concerns is crucial for ongoing improvement and risk mitigation. The analysis reveals a moderate positive relationship between the respondents' knowledge and practices regarding laboratory waste management. The statistically significant correlation with a p-value of 0.26 (p-value 0.05) suggests that individuals with higher levels of knowledge tend to exhibit better practices. These findings align with previous research emphasizing the pivotal role of knowledge in influencing individuals' behaviors and practices concerning laboratory waste management. When individuals possess a comprehensive understanding of proper procedures, regulations, and potential risks associated with laboratory waste, they are more inclined to adopt appropriate practices. Therefore, fostering knowledge through education and training is essential in promoting responsible and effective waste management in laboratory settings.

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