THE RELATIONSHIP BETWEEN THE WASTEWATER TREATMENT PROCESS RESULTING FROM THE ACTIVITY OF MEDICAL INSTITUTIONS AND THE MAINTENANCE OF A HEALTHY AND SAFE ENVIRONMENT

Luminita GUTU, Catalina CROITORU, Elena CIOBANU, Dumitru CHEPTEA, Vasile SOFRONIE
Nicolae Testemitanu State University of Medicine and Pharmacy, Republic of Moldova
Corresponding author: Luminita Gutu, e-mail: luminita.gutu@usmf.md

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Introduction. The Monitoring of the quality of drinking water, wastewater, freshwater and seawater is of great importance for the safety and well-being of people, fauna and flora. The medical staff involved in the medical waste management system must know the definitions, categories and waste amount within the unit; risks to the environment and human health at each stage of the waste management (waste removal; the plan for the management of the waste resulting from medical activities), as well as the internal regulations and the codes of procedures applied to the collection, storage, transport and neutralization of the hazardous waste**. Material and methods.** A structured literature review was conducted, by analysing 21 sources, using the PubMed database. The word combinations used were as following: "impact" AND "medical waste"; "Liquid waste" AND "hospitals"; "Wastewater" AND "hospitals". **Results.** Hospitals are important sources of pollutants resulting from diagnostic activities: chemical reagents, radioactive markers, iodinated contrast agents, including pharmaceutical residues, constituting liquid waste, including those without proper treatment, which may end up into the wastewater and cause serious damage to public health and the environment. Liquid wastes from hospitals include various biological fluids from the human body, including blood. It is estimated that about 75% of hospital waste is generated by medical care, while about 25% is classified as hazardous infectious waste. In the context of the COVID-19 pandemic, this risk is constantly increasing. The anatomo-pathological wastes, including biopsy materials collected in operating rooms (amputated tissues and organs) and maternity (fetuses, placentas), anatomical parts resulting from autopsy laboratories, animal carcasses resulting from research and experimentation activities are often infectious delusions. These comes into direct contact with the water, which then reaches the sewer system. In general, wastes resulting from medical activities are improperly collected, transported and stored, thus causing pollution of water basins near localities or downstream areas, which are the main sources of water supply for both humans and animals. In order to prevent the liquid waste leakage, medical wastes must be stored properly. Storage spaces must be provided with an automatic temperature monitoring and recording system, which will be systematically evaluated. The temporary storage conditions should comply with the hygiene regulations in force. The duration for transportation and final disposal of infectious medical waste shall not exceed 24 hours. Medical waste generated on site will be handed over to an authorized operator for the collection and transport of hazardous waste for safe final disposal. **Conclusions.** The minimization of the negative effect of liquid waste resulting from medical activity can be achieved by disinfection and proper disposal of liquid wastes. Medical waste producers must avoid mixing different types of hazardous waste, including hazardous waste with non-hazardous one, whereas the medical units should be responsible for the ongoing training and education of employees.

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