



UPHO UNIVERSITY DENTAL CLINICAL CENTER "SVETI PANTELEJMON" - SKOPJE

REGULATIONS AND LEGAL ASPECTS IN MANAGEMENT OF MEDICAL WASTE



Shikoska Biljana, Dimova Cena, Schumanov Gjorgji, Pavle Apostoloski

INTRODUCTION: Medical waste, according to the law of waste management is waste generated in medical and health institutions (dispensaries, hospitals, polyclinics and outpatient clinics, dental clinics, veterinary stations etc.), originated as a product of used items and materials during diagnosis, convalescence, treatment and prevention in humans and animals.

Medical waste is a risk to those who produce, package, store, transport, treat and perform disposition. The possibility of infection of some diseases and their spread in hospitals due to negligence in the handling of medical waste, have to inform the entire staff in management and disposition to reduce the risk to minimum.

On the other hand hazardous medical waste contains elements of chemical and biological threat, whether in the form of solid, liquid or gaseous waste. The properties of hazardous medical waste are virulence, toxicity, carcinogenicity, infection and so on. According to these properties hazardous medical waste differs from the municipal medical waste.

The actual management of medical waste, is an organized process that consists of **five elements:**
separation, identification, handling, treatment and disposal.

AIM: The aim of the study was to highlight the importance of knowledge of legal regulations and provisions of the proper management of medical waste with special emphasis on attitudes, division and recommendations of the World Health Organization.

MATERIAL and METHOD: As a special heterogeneous mixture of municipal, infectious, pathological, pharmaceutical, laboratory waste, disinfection agents and packaging, as well as radioactive and chemical waste, hazardous medical waste can be divided into several subgroups for easier and more accurate identification and, therefore, is divided on:

- Infectious (laboratory cultures, fluids, materials and equipment that have been in contact with infected patients);
- Pathological (blood, other body fluids, body parts, fetuses);
- Sharp (objects of needles, scalpels, knives, broken glass);
- Pharmaceutical (drugs, residues of drugs);
- Genotoxic (cytostatic, genotoxic chemicals);
- Chemical (solvents, laboratory reagents, disinfectants);
- Heavy metal (batteries, sphygmomanometers, thermometers);
- Pressure vessels (gas cylinders, metal vessels) and
- Radioactive waste (scrap used in radiation therapy, urine and fluids of patients treated with radio-nuclides).



RESULTS: The World Health Organization recommends as protective gear for anyone who comes into contact with medical waste to wear:

- ❖ helmet;
- ❖ protective face mask;
- ❖ goggles;
- ❖ Special jumpsuits;
- ❖ industrial aprons;
- ❖ feet guards;
- ❖ boots etc.



CONCLUSION: Firstly, it's important to clearly define the responsibility for proper waste management, to the process of its final processing. It is necessary to develop a comprehensive and planned management system that beside responsibility, should provide funds for safe implementation of waste. This is a long process that despite organizational structure requires individual and professional commitment. Unacceptable, but still a fact is that medical waste from some health institutions (mostly smaller private clinics), without special labels are taken from the relevant municipal departments and with municipal waste is discharged in urban landfills without special processing.