

TRAINING COURSE “MODERN ASPECTS OF REMOVAL AND DISPOSAL OF PHARMACEUTICAL WASTE” IN THE SYSTEM OF ADVANCED PROFESSIONALS FOR PHARMACISTS

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The article presents the results of the introduction into the system of advanced training of persons with higher pharmaceutical education of the training course “Modern problems of neutralization and disposal of pharmaceutical waste”, which addresses issues related to environmental problems and legal regulation in the field of environmental protection, circulation of pharmaceuticals waste, methods of their neutralization, recycling, ecotoxicity of drugs.

Keywords: pharmaceutical waste, neutralization, recycling, ecotoxicity, educational, course, ecology.

The dynamically developing pharmaceutical market is characterized by a constant increase in production volumes of drugs, an increase in the share of generic drugs on the market, which in turn increases the availability of drug therapy for the patient. At the same time, along with increasing public awareness of information about drugs, their availability, and the development of the concept of responsible self-medication, according to the European Federation of Pharmaceutical Industries and Associations (EFPIA), from 3 to 8% of sold drugs remain unused, according to some According to data, this figure can reach 50%, which makes the problem of regulating the circulation of pharmaceutical waste relevant [1].

Disposal and neutralization of drugs are an integral part of the drug circulation process. The environmental situation in the country and the environmental well-being of the population depends on the correct organization of these processes. To improve the knowledge of pharmacists in the field of handling pharmaceutical waste, the Department of Pharmaceutical Chemistry of the Belarusian State Medical University developed a training course “Modern problems of neutralization and disposal of pharmaceutical waste” for pharmacists with higher pharmaceutical education and teachers of educational institutions of the healthcare system. During the development of this course, advanced training students consider environmental problems of the environment, legal regulation in the field of environmental protection, treatment of

medical and pharmaceutical waste, methods of their neutralization and disposal, ecotoxicity of drugs and their metabolites, environmental safety of drug packaging.

The duration of training is 20 hours. During this time, students, in the format of lectures, practical classes and thematic discussions, consider environmental problems at the current stage of social development (climate change, energy shortages, the problem of air pollution, waste management of various groups, destruction of the ozone layer, forest destruction). The majority of the curriculum (12 hours) is devoted to students mastering issues related to the management of pharmaceutical waste: their classification, regulatory legal acts regulating the procedure for handling and disposal. An integral part of the training is familiarization with the problem of environmental pollution by waste drugs and their metabolites, and the influence of these compounds on flora, fauna and humans, with methods for determining the environmental toxicity of drugs. Particular attention is paid to the organization of disposal and neutralization of cytostatic drugs. To conduct training, in addition to lectures and information materials, test tasks and situational tasks are used, which increases the efficiency of students' mastering new material.

The training course “Modern problems of neutralization and disposal of pharmaceutical waste” helps pharmacists fill the knowledge gap in regulating the circulation of pharmaceutical waste, improve the environmental literacy of specialists, which in turn will have a positive impact on the environmental literacy of specialists and the population.

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