Environmental protection against the harmful effects of human medicinal products

Abstract

Medicinal products help humanity, but can they be a risk for it? In recent years, the occurrence of their residues in the environment and their impact on it has been monitored. Their occurrence is found to be widespread. Despite the small concentrations in which they occur, they have been shown to affect, for example, aquatic organisms. The issue of residues of medicinal products in the environment is a current topic, beginning to be also addressed by the European Union.

The diploma thesis presents the legal regulations of environmental protection against the adverse effects of human medicinal products; it evaluates their effectiveness and, contains proposals *de lege ferenda*.

First, it outlines the issue and the extent of the occurrence of residues of medicinal products in the environment and their risks for it. Furthermore, the work deals with the legal process of registration of medicinal products regulated by European Union law, within which an environmental risk assessment is created. There are described the shortcomings of the risk assessment procedure, the lack of a link to it that would effectively protect the environment, and the non-disclosure of results, which violates the right to information of the environment.

The following part deals with the consumption of an already registered medicinal product and the influence on it to protect the environment better. The author deals with the possibility of *de lege ferenda*, which would allow the re-use of unused pharmaceuticals, which, in addition to protecting the environment, would also reduce the cost of treatment. Then, the description of the disposal of medicinal products is presented together with the operation of the system for collecting unusable pharmaceuticals.

The work further deals specifically with the protection of waters which are the most polluted by residues of medicinal products. It describes the protection of waters against pollution by wastewater and the current monitoring of pollutants in water.

According to the author, the legal regulation of environmental protection against the effects of medicines is currently ineffective.

Keywords: medicinal product, environmental protection, environmental risk assessment