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RUSSIAN MARKET OVERVIEW OF SEPARATE COLLECTION CONTAINERS FOR WASTE DRUG PACKAGES

M.S. Bratchikova 3rd year student of the specialty "Bioengineering and Bioinformatics", A.S. Belosludtsev Assistant of the Department of Pharmacy of the Pharmaceutical Institute named after A.P. Nelyubin

Bratchikova Maiia Stanislavovna

I.M. Sechenov First Moscow State Medical University, Moscow, Russia

Introduction

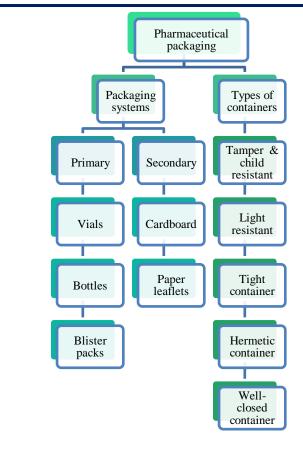
Improper waste management practices, such as the disposal of medicines in landfills, can have serious consequences for public health. Discarded medicines can reach into the soil and contaminated groundwater, leading to the spread of antibiotic-resistant bacteria and other harmful substances.

Landfills can contaminate soil and water sources, while burning waste can release harmful pollutants into the air. This can lead to respiratory problems, water pollution, and other health issues.

The Russian domestic market provides various container options for the collection of used drug packages (UDPs), including containers for plastic and paper, glass, and non-recyclables.







Aim

Find and describe national offerings of ready-to-use ecocontainers (ECs) for SC of UDPs.

Objectives

Study the types of ECs for SC of UDPs and analyze the Russian market of their manufacturers.

Materials and methods

Web-based content analysis and pilot personal informal interview with an ecoconsultant

Container Design

Functionality

- The container must be userfriendly and accessible, catering to the needs of all individuals, including those with disabilities. It should also possess the capacity to accommodate a substantial amount of medicinal waste for secure disposal.

Materials

- The container needs to be constructed from robust and safe materials, capable of enduring frequent use and sanitization.

 Design
- The container should feature clear labels and guidelines for usage and disposal. Additionally, it must include

Results

In Russia there are several companies engaged in production and sale of ECs for SC of UDPs. Special boxes for blister collection can be purchased from a number of vendors, such as PlastService LLC, Mercury Safety Agency LLC, Contr wholesale and retail online store. Such services as "Eco Service", "Eco Box", "Plastelo", "Pandasteel" can be used for recycling of secondary packaging. The latter company has developed ECs for the "Ecopharmaceuticals" project from the French brand "Boiron". Their containers are among the safest and most convenient to use.

In addition, it is worth mentioning "Green Container", an open social project to collect and recycle blisters from medicines. With the help of this project, you can organize your own blister collection point, become an eco-volunteer, improve and deepen your knowledge of ecology. Furthermore, there are companies that, upon signing a contract with them, can provide boxes for SC of waste and its subsequent transportation to a sorting center (e.g. "Eco Line").





Conclusion

The ECs offered by these companies provide convenience and safety in the collection of UDPs. They contribute to efficient recycling of materials, minimize environmental impact and save natural resources.

Further support and implementation of SC and recycling systems for UDPs are needed to reduce the amount of hazardous waste in landfills.

Reference list:

- 1. Ivanykina T.V., Krasnopeeva A.V. Sbor i utilizaciya medicinskih othodov v GBUZ Amurskoj oblasti «Zejskaya bol'nica im. B.E. Smirnova» // Vestnik Amurskogo gosudarstvennogo universiteta. Seriya: Estestvennye i ekonomicheskie nauki [Collection and utilization of medical waste in the State Budgetary Institution of Amur Region "Zeya Hospital named after B.E. Smirnov" // Bulletin of Amur State University. Series: Natural and Economic Sciences]. 2021. №93. URL: https://clck.ru/36ULGt
- 2. Deulina L.E., Hasaeva E.I., Ersulova I.S. Utilizaciya lekarstvennyh preparatov // Stolypinskij vestnik [Disposal of medicines // Stolypinskij Bulletin]. 2022. №7. URL: https://clck.ru/36ULKH;
- 3. Minigazimov N.S., Aznagulov D.R., Minigazimova L.I. Toksichnye othody, obrazuyushchiesya u naseleniya. Problema sbora, obezvrezhivaniya i utilizacii // Medicina truda i ekologiya cheloveka [Toxic wastes generated by the population. The problem of collection, neutralization and utilization // Occupational Medicine and Human Ecology]. 2023. №2. URL: https://clck.ru/36ULMn;
- 4. Utilizaciya prosrochennyh lekarstvennyh preparatov [Disposal of expired medicines] [digital source] URL: https://clck.ru/36ULPj (date of address: 29.10.2023);
- 5. Kontejnery dlya razdel'nogo sbora musora: tipy, vidy, osobennosti [Containers for separate waste collection: types, kinds, features] [digital source] URL: https://clck.ru/36ULRA (date of address: 29.10.2023).