



### World experience in the implementation of separate collection and eco-disposal of waste drug packages

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**Background.** Disposal of used medicine packages (UMPs) is a serious problem of our time. In many countries there is no algorithm for their collection and disposal. As a consequence, 90% of the population throws away UMPs with household garbage [1]. Raising public awareness and opening new collection points (CPs) for UMPs around the world can solve the problem. This study was conducted to assess the current situation.

**Aim.** Analyze the world experience of organization of collection and utilization of UMPs.

**Objectives.** Analyze thematic information sources, review locations where UMPs are collected.

**Materials and methods.** Literature search in electronic scientific databases PubMed, Google Scholar, content analysis of thematic websites.

**Results.** In Moscow, eco-boxes for UMPs are installed at the Artplay Design Center, VkusVill stores and the Sobranka Eco-Center. VkusVill in cooperation with the Ecopharmaceuticals project of Boiron has installed a box for collecting blisters, which are then sent to the National Ecological Company for separate recycling. In the Czech Republic, UMPs can be disposed at any pharmacy. In the UK, there are CPs for cardboard boxes, leaflets, plastic and glass packages near households. However, blisters cannot be recycled [2]. In Japan, there are eco-containers for donating blisters in exchange for "Terracycle Point" (1 unit equals 1 yen) [3]. In South Africa, UMPs are collected in hospitals [4]. In Australia, blisters can be sent to the office of a manufacturing company or they can be turned back to pharmacies that cooperate with recycling organizations [5]. Ethiopia, Tanzania and Malaysia do not have appropriate policies for the disposal of UMPs and raising public awareness. In Brazil, regulations for the collection of UMPs only appeared in 2020 [6].



**Conclusion.** Disposal of UMPs is gradually developing only in large countries. Collection of UMPs is mostly carried out in hospitals and pharmacies. It is necessary to educate the population, improve the regulatory field and ensure greater availability of CPs for UMPs.

### Reference list.

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