

MEDICINES COLLECTION CAMPAIGNS: THE DESPISED CORNERSTONE FOR SUCCESSFUL REVERSE

LOGISTICS PLANS

RESUMO

1. INTRODUCTION Brazil has started the legal medicines reverse logistics (MRL) system in 2020 under the enforcement of the Federal Decree 10,388 (Brazil, 2020). Following the normative, there was organized the LogMed system with the participation of 16 entities (four from retail, two from distribution, and 10 from industry). These organizations are responsible to manage the collection and provisory storage (from the retail side), transportation (from the distribution side of the supply chain), and incineration (from the industrial side). According to the Decree, the program would suppose to cover all the State capitals and cities with 500,000 or more residents from 2021 to 2022; and reach cities with 200,000 or more residents up to September 2023 (Brazil, 2020). In the first year after the LogMed creation (2021-2022), there were collected 52.7 tons of unused or expired medicines in 3,634 delivery points (LogMed 2021). The coverage reached 21 State capitals and the Federal District, besides cities with more than 500,000 habitants - including 38 municipalities from São Paulo State that have started the MRL already in 2018. At the end of 2023, LogMed reported the collection of 362.9 tons of unused/expired medicines in 446 municipalities - 8% of the total Brazilian municipalities (Paludetti & Redondo, 2023). According to the LogMed system, these municipalities, in the second period of the collection (2022-2023), comprise all the State capitals (27), cities with 500,000 or more residents, and some cities with 200,000 residents. The Decree mandates that one collection point must be available for each group of 10,000 residents all over the country up to 2025 when the system will be revised. However, the normative does not obligate the LogMed or even the government to run public campaigns for unudes/expired medicines collection. Until December 2023, there were implemented 6,294 collection points (84.5% of the target), according Paludetti and Redondo (2023). 2. RESEARCH QUESTION, OBJECTIVE, PROCEDURES The average collection per capita in the Brazil reached 1.7kg considering the accumulated data of 2021 to 2023, as well as the demographic census of the National Institute of Geography and Statistics (IBGE) released in 2022 - that updated data about the number of habitants in each Brazilian State and city, resulting in the need for demographic data rectification. After three years of LogMed running, the big questions that remains are: is the LogMed system performing satisfactorily when compared to similar systems abroad? What about the campaigns for unused/expired medicines collection? The objective of this Abstract is to problematize the LogMed system regarding its effectiveness. To reach this goal, a small survey was conducted in an university environment in a Brazilian capital, in order to know about how should be the collection campaigns, and an interview was carried out with an agent of the Environmental Protection Agency (EPA) of the USA with the aim to know about the performance of MRL in that country, and compared it with Brazil. 3. PRELIMINARY RESULTS In USA, the medicine reverse logistics is under the Environmental Protection (EPA) enforcement since 2019. EPA rules devolutions flows in which the participants (industry, distributors, retailers) must decide the situations in which a medicine is considered under a credit system (back in the supply chain involving industry, distributors and retailers), and the situations in which a medicine must be send to incineration. Regarding the consumer-retailer flow, the regulation of the medicines devolutions is under the Drug Enforcement Administration (DEA) inspection. Since 2019, DEA promotes the Take Back Day twice a year, i.e., every April and in October (exception was October 2021, when it was not carried out). Since the beginning, 9,285,000 tons were collected (27.2 kg per capita). Nonetheless, in both Brazilian and US reverse systems there are not explicit and continuous campaigns performed by the supply chain stakeholders or the governments. In Brazil, although the Federal Decree does not enforce campaigns to incentive the consumers to deliver medicines back, it mentions this possibility - campaigns addressed to supply chain managers. We have interviewed an EPA agent that worked in the regulatory aspects of medicines returns in 2018-2019. She informed that the issue of responsibility for public campaigns of medicines collection was subject of a lawsuit in the Supreme Court, although it was not appreciated. In Brazil, we are investigating the perception of the university population about public and private campaigns for medicines reverse logistics. Since April to July 2024, 92 respondents placed in Porto Alegre, Rio Grande do Sul, participated on a short survey. From these, 52.3% have undergraduation level (complete or ongoing). Among these, 51.1% are 18-30 years-old. A percentage of 66.3% have never heard about unused/expired collection campaigns from homes to retailers. From those that declared heard about such campaigns, 33.7% stated that found information on this subject in websites or in the Instagram. According to 88% of the respondents, in retail stores where they use to purchase medicines, the pharmacists never told them about the medicines correct discharges, and they have never asked the clients to take the medicines back to the store. The attitude of delivery is not common among 81.5% of the respondents. From those that use to deliver, 50% do not remember how often they do it, and 23.7% declared they deliver back once a year. 72.8% of the surveyed persons said they did not see collection devices in the pharmacies they use to purchase, however 62% believe that collection campaigns must be mandatory - employing informative folders to the whole population, or promoting information activities in the formal educational system. This survey has 12 questions and it is opened until December 2024. 3 FINAL REMARKS, LIMITATION, FUTURE STUDIES From the preliminary results of the interview and the survey, it is clear that massive public take back campaigns are necessary to improve the amount of returned medicines and to raise awareness in the society. However, these are not provided neither by the governmental Brazilian environmental authorities, nor by the LogMed system.

Palavras-Chave: reverse logistics / medicines / public campaigns