DISPOSAL OF MEDICINES IN HOUSEHOLDS IN NITERÓI-RJ

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Introduction

Improperly disposed domestic pharmaceutical waste poses a significant threat to both the environment and public health. At home, medicines are often thrown away in the common trash, flushed down sinks, or even toilets[1-5]. However, these substances require special disposal methods to prevent potential damage[6]. Therefore, it is essential for people to use designated locations, like authorized collection points, for safe disposal. This study aimed to analyze how residents of Niterói, RJ, dispose of medicines in their homes. It investigated the public's knowledge about appropriate disposal sites and the prevalence of improper disposal practices, aiming to shed light on the challenges of managing pharmaceutical waste in the region.

Material and Methods

A total of 290 participants were interviewed in their homes. A structured electronic questionnaire composed of 33 questions addressing issues related to access, use, and disposal of medicines was used. This abstract presents partial results related to the topic of medicines disposal are presented. Questionnaires were distributed by region—Praias da Bahia, Norte, Pendotiba, Leste, and Oceânica—using a proportional allocation strategy based on the number of inhabitants in each area. Researchers followed a pre-established script and administered the questionnaires directly to residents. Participants were selected if they were over 18 years old and capable of answering questions about their access to and use of medicines. The research was approved by the Research Ethics Committee of the UFF Faculty of Medicine.

Results and Discussion

Regarding the disposal of expired or unused medicines, it was found that the majority of interviewees (64.8%) reported discarding them in household waste. This practice poses an environmental threat and the risk of inadvertent consumption by people who might find these medicines in the trash. Additionally, 12.4% admitted disposing of medicines in the sewage system, which is also inappropriate. Water treatment systems, such as chlorination, ozonization, flocculation, and activated carbon adsorption, cannot decontaminate pharmaceuticals. Consequently, Sewage Treatment Stations (STPs) do not effectively remove them, leading to contamination of surface waters and compromising the quality of water intended for urban supply[7]. Only 9.7% reported disposing of medicines at designated collection locations. Analyzing the relationship between education and proper disposal of medicines revealed that most respondents who used authorized stations had completed secondary education or some higher education. No participant with an elementary education or no formal education indicated proper disposal practices. Furthermore, about 70% of respondents were unaware of the consequences of improper medicines disposal. This highlights the urgent need to educate the public about best disposal practices and the associated environmental impacts.

Conclusion

The study examined how residents of Niterói, RJ, dispose of medicines at home. It revealed that most participants discard medicines in domestic waste or the sanitary sewer. The research highlighted a gap in public knowledge about proper disposal practices, underscoring the need for

better information dissemination. Public awareness of correct disposal is essential for tackling pharmaceutical waste management challenges in the region.

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