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Perception and Practices towards Storage, Disposal and Misuse of Pharmaceutical Waste in Households amongst the Staff Working at Dhakshinapaya Ministry Complex, Galle

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Abstract

In low and middle-income countries, pharmaceutical waste management is a less concerned area that has a high impact on human and animal health, environmental pollution, and the health economy. This study was designed to explore the current knowledge and practices of storage, disposal, and practices of pharmaceutical waste among households in Galle, Sri Lanka. This was a qualitative phenomenological study performed using in-depth interviews guided by a semi-structured questionnaire conducted amongst staff at Dakshinapaya Ministry Complex, Galle (n=40) until the saturation point was achieved. Thematic analysis was performed. Among the participants, 29 (72.5%) were females. Themes emerged under two aspects: current knowledge and current practices towards storage, disposal, and misuse of unused and expired pharmaceuticals. The significant themes identified under knowledge were lack of knowledge regarding "pharmaceutical waste", and reasons for keeping the medications in households, and the themes under practice were mainly the ways of disposal of unused and expired medications. Although most participants had knowledge of the harmful effects of pharmaceutical waste on humans, they had minor knowledge of environmental effects. The death of the patient, forgetting, relief of symptoms, adverse effects, receiving large quantities, and discontinuation were reasons for the accumulation of unused pharmaceuticals at home. A significant finding was that household members had less understanding that the reuse of unused medications can cause various health hazards and that they normally practiced reusing them to save money. The majority of participants practiced unsafe methods, such as flushing down toilets, pouring into a sink and burning, etc. instead of practicing the drug take-back system. The incorrect practices in storage, disposal, and misuse of pharmaceutical waste and low concern for the environmental effects leading to improper disposal methods highlight the necessity for awareness programs and introducing a proper pharmaceutical waste management system, such as a drug take-back system.

Keywords: Disposal, Expired, Medicines, Pharmaceutical Waste, Storage.

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