

Practice of Pharmaceutical Waste Management and Influence of Factors on it in Private Pharmacies in Jaffna Municipality Area

J. Thivya¹, S. Thuvaragan^{1*}, R. Surenthirakumaran²

¹Unit of Allied Health Sciences, Faculty of Medicine, University of Jaffna,

²Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna

**sthuvargan@univ.jfn.ac.lk*

Pharmaceutical Waste Management is the proper handling of pharmaceutical waste includes collection, segregation, storage, transport and safe disposal methods. Descriptive cross sectional study was carried out to describe the types and sources of pharmaceutical wastages and assess the pharmaceutical waste management practices in private pharmacies in Jaffna Municipality Area. An interviewer administered questionnaire which was finalized with the help of academic personnel was used to collect data. There were 31 private pharmacies in this area and all pharmacies were included. Data was analyzed using SPSS version 23. Expired drugs are the generated main waste. Solids and powders were generated in 96.2% (n = 25) of the pharmacies while, semi-solids and liquids were generated in 38.5% (n = 10) and 23.1% (n = 6) of the pharmacies respectively. In this study 61.5% (n=16) of pharmacies had poor practice on pharmaceutical waste management. Among the pharmacies, 23.1% (n= 6) pharmacies had a separate waste room for the storage of pharmaceutical waste. Pharmaceutical waste was sorted in 30.8% (n=8) pharmacies, stored in separate containers in 15.4% (n=4) of the pharmacies, labeled as expired products before disposal in 73.1% (n=19) of the pharmacies. Disposal process was documented in 38.5% (n=10) of the pharmacies. Among the disposal methods of pharmaceutical wastages open dumping was practiced by 23.1% (n= 6) of the pharmacies, while 38.5% (n=10) of the pharmacies practiced open burning and 38.5% (n=10) of the pharmacies returned their waste to distributors. On practice of pharmaceutical waste management, years from commencement of the pharmacies has statistical significant on level of practice (p value < 0.05). Practice of pharmaceutical waste management is poor among private pharmacies in Jaffna municipality area which could be a potential threat to environment.

Key words: Pharmaceutical wastage management, Disposal, private pharmacies