

ABSTRACT

Pharmaceutical Waste Management (PWM) has emerged as a serious issue, with both health concerns and environmental damage. The study assessed the availability of infrastructures that supports sound pharmaceutical waste management, identified the commonly dispensed drugs among the community pharmacies and those found in households, determined the proportion of community pharmacy managers and households with knowledge of pharmaceutical waste management and **also** determined the common methods of pharmaceutical waste management in Nkubu town among community pharmacies and households in sanitation service chain. The study **was** conducted in Nkubu Town, Imenti South, sub-county. A **cross-** sectional study design **was** utilized to achieve the specific objectives. Data was collected by use of questionnaires. The sample size was 19 community pharmacy managers and 380 households' heads located within the borders of Nkubu Town, Meru County. Descriptive data **was** analyzed using the Statistical package for social sciences (SPSS) version 22 and findings were presented using figures and **tables**. Antibiotics were the most commonly disposed **of** drugs along the sanitation service chain. Antimicrobials interfere with water treatment process depend on microbes for biodegradation. It was also evident that majority of households and community pharmacies are either connected to piped water or a sewerage system. Improperly disposed pharmaceuticals end up in garbage collection centers and water purification systems which are not sufficiently equipped to manage this form of waste. On the proportion of community pharmacy managers and household heads with knowledge on pharmaceutical waste disposal, there was lack of training on the same. The study recommends **the** need to establish public awareness, educational programs regarding management and handling of unwanted pharmaceuticals among households that would highlight their effects both on human beings and across the sanitation chain if poorly disposed. Sensitization of the public on the dangers of poor disposal of pharmaceuticals and provision of collection points for proper disposal are recommended especially at the local dispensing chemists. The study established study that pharmaceutical **waste** is evident in across the sanitation service chain. The pharmacy and poisons board, the regulatory authority for pharmacies should discourage the establishment of community pharmacies before verifying the pharmaceutical waste disposal sanitation infrastructure available to them. This requirement should be a prerequisite for pharmacy outlet licensing. Future studies can explore further the presence and concentration of active

pharmaceutical ingredients/agents in municipal waste, sewage and drinking water to build on the findings of this study.