

21st Scientific Symposium of the Austrian Pharmacological Society:
Joint Meeting with the British Pharmacological Society and the
Pharmacological Societies of Croatia, Serbia and Slovenia
Graz, 16–18 September 2015

MEETING ABSTRACT

A8.2

An analysis of expired medications in Serbian households

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Background: Expired medicines accumulating in households is a universal problem worldwide. The potential presence of expired medications in households has recently been receiving attention due to its implications regarding health outcomes, health care cost, and patient and environmental safety. The aim of this study was to determine the amount and structure of expired medications in Serbian households and to determine the therapeutic groups and clinical areas which generate most waste.

Methods: This was an observational, cross-sectional study conducted in households in the city of Novi Sad, Serbia. The study was performed over an 8-month period (December 2011 – July 2012) and consisted of personal insight into the inventory drugs in households. In order to obtain a calculated sample size, systematic random sampling was performed.

Results: Of 1,008 families, 383 agreed to participate and complete the questionnaire (38.3% response rate). In almost half of households (44.4%), expired medications were maintained. The amount of expired medications was 402 items, corresponding to 9.2% of total medications present in surveyed households. Of all expired medications, 70.4% were prescription drugs. The majority of expired medications (64.7%) were in solid dosage (tablets, capsules, granules, lozenges), following semisolid (ointments, creams, gel, suppositories) and liquid dosage forms (drops, syrups). Expired drugs in the households belonged mostly to 3 categories: antimicrobials for systemic use (16.7%), dermatological preparations (15.9%) and drugs for alimentary tract and metabolism (14.2%).

Discussion: Our findings were mostly consistent with other studies in terms of percentage of expired medications, but varied in the therapeutic groups of expired drugs. The differences are potentially attributable to the difference in the demographic characteristics of the investigated households, different health-seeking habits or different supply routes of medications. Serbia must consider the issue of medication wastage seriously. Part of this wastage can be prevented, and considering the limited resources of the country, it is prudent to start taking action. Finally, public services should promote awareness raising and educational campaigns targeting different age groups and using various communication routes.

Acknowledgements: This work was supported by the Ministry of Science and Technological Development of the Republic of Serbia, project no. 41012.

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