Prescribing errors on multidose drug dispensing prescriptions

Anette Vik Jøsendal*^{1,2}, Trine Strand Bergmo¹, Anne Gerd Granås²

1: Norwegian Centre for E-Health Research, Tromsø 2: Department of Pharmacy, University of Oslo

Background: Prescribing errors are a common cause of preventable medication adverse drug events, and community pharmacists play an important role in correcting these errors. In Norway, many patients receive home deliveries every two weeks with multidose dispensed drugs (MDD). Both the prescribing system for MDD patients (paper based vs. electronic prescriptions) and the dispensing process (MDD vs. original packaging) differ from that of ordinary prescriptions.

Objective: Describe the frequency and type of errors community pharmacist detect on MDD prescriptions.

Methods: For two consecutive weeks, 11 community pharmacies used a self-completing form to register errors and interventions on MDD prescriptions linked to drug-related errors (e.g. dose, strength, duration, drug shortages), formal/technical errors (e.g. missing signature, expired prescriptions), or other errors (e.g. missing shipping address).

Results: In total, over 500 errors or omissions were registered, with an overall intervention rate of one in eight prescriptions. On average, 5 minutes was used to correct an error. Formal errors constituted almost half of the errors. About a quarter of these got rectified before dispensing. However, the majority were dispensed without correction despite formal errors. Only a small proportion were not dispensed. Drug-related errors constituted half of the total errors, and a considerable fraction were due to drug shortages. The main action to resolve an error was to contact the prescriber, a nurse in the home care services, or resolved by the pharmacists using their own professional judgment.

Conclusions: Community pharmacists intervene on one in eight MDD prescriptions. About half or errors on MDD prescriptions are formal/technical in character, and about half are drug-related. Many prescriptions are dispensed despite missing signatures or being expired. Most of the formal errors could be avoided if the prescriptions were electronic rather than paperbased.