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Short communication

Therapeutic duplication of anticoagulant therapy in an elderly patient: the role of the pharmacist in detecting medication-related problems

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Introduction

Therapeutic duplication represents a significant medication-related problem and occurs when a patient simultaneously uses two or more medications containing the same active substance or medications from the same therapeutic class without a justified clinical indication. This issue is particularly common among elderly patients who are treated by multiple healthcare providers and often use numerous medications for chronic diseases.

During the Covid-19 pandemic, the healthcare system was additionally burdened, contributing to difficulties in monitoring and appropriate medication use. Community pharmacists frequently encountered patients receiving complex therapies prescribed by different specialists without adequate information regarding indications, duration of treatment, or proper medication use. In many cases, patients were unable to identify the purpose of their medications, increasing the possibility of inappropriate use, duplication of therapy, reduced compliance, and serious adverse effects.

One of the greatest challenges in pharmacy practice is the lack of complete and clear information regarding the patient's therapy. Specialist reports often contain multiple medications without detailed explanation, while elderly patients frequently rely on memory or advice obtained from different physicians. This highlights the important role of the pharmacist in medication review, patient counseling, identification of potentially inappropriate therapy, and prevention of medication-related problems.

The aim of this case report is to present a patient exposed to polypharmacy during the COVID-19 pandemic and to emphasize the importance of pharmaceutical care and medication review in improving patient safety and rational drug use.

Pharmaceutical case report

A 73-year-old male patient presented to the pharmacy during the COVID-19 pandemic in 2021. Upon arrival, the patient appeared visibly pale, with shortness of breath, pronounced weakness, pain in the extremities and abdomen, reduced overall strength and energy, as well as complaints of dry mouth. The patient reported: "*This therapy is not making me feel any better at all*."

The pacient was asked to bring all medications curently in use to the prahracy for review in order to determine if the therapy he takes is the cause of this condition.

He was using:
- Rosuvastatin 40 mg once daily in the evening
- Trimetazidine 35 mg once daily
- Selenogin once daily

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- Perindopril/Indapamide 4 mg/1.25 mg once daily in the morning
- Andol 100 mg once daily in the morning
- Pantoprazole 40 mg once daily in the morning
- Rivaroxaban 20 mg once daily (prescribed to take for 14 days after hospital discharge and then return for follow- up examination)

During a detailed medication review, it was discovered that the patient had been simultaneously using three different products containing the same active substance — Rivaroxaban 20 mg — believing they were different medications intended for different conditions.

The patient had:

- purchased Xarelto 20 mg from a pharmacy based on a previous medical report,
- received a prescription for Rufixalo 20 mg from a general practitioner, and additionally, his son had obtained Runaplax 20 mg from Bulgaria.

The patient was insufficiently informed that all three medications contained the same active ingredient and should not be used concomitantly. Furthermore, the concomitant use of rivaroxaban and Andol 100 mg led to an increased risk of bleeding.

The patient's clinical presentation and symptoms suggested a possible serious adverse effect associated with overdose and an increased risk of hemorrhagic complications. Following pharmaceutical intervention and a detailed medication review, the patient was advised to immediately contact his primary care physician/specialist for urgent evaluation, laboratory investigations, therapy adjustment, and immediate discontinuation of Andol and rivaroxaban until further medical assessment.

Conclusion

The pharmacist represents the final checkpoint in the patient's medication management process, a role that is highly responsible and, in some cases, life-saving.

This case highlights the importance of pharmaceutical care, counseling, and professional responsibility in reviewing therapy regimens and identifying duplicate therapy, especially in elderly patients who often have limited pharmaceutical knowledge and insufficient understanding of their own medications.

The possibility of therapeutic duplication is significantly increased when patients independently purchase medications using specialist reports or prescriptions from different healthcare providers. In many cases, patients visit multiple pharmacies, where they may receive the same generic medication marketed under different brand names, without realizing that the products contain the same active substance.

Therefore, thorough medication review and active pharmacist involvement are essential in preventing medication errors, adverse drug reactions, and potentially life-threatening complications associated with polypharmacy and duplicate therapy.

References

Huynh, I., Rajendran, T., 2021. Therapeutic duplication on the general surgical wards. BMJ Open Quality. 10, e001363. https://bmjopenquality.bmj.com/content/10/3/e001363