

# The Impact and Challenges of Polypharmacy on Patient Safety

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## DESCRIPTION

Polypharmacy, the concurrent use of multiple medications by a patient, is a growing concern in modern healthcare. While polypharmacy is often necessary for managing complex health conditions, it presents significant risks for patients, especially the elderly. Adverse drug reactions, drug interactions, and medication non-adherence are just a few of the potential complications associated with polypharmacy. In this context, pharmacists play an essential role in managing complex medication regimens, ensuring patients take their medications safely and effectively.

Polypharmacy refers to the use of five or more medications, which is increasingly common, particularly among elderly patients. Older adults typically suffer from multiple chronic conditions such as diabetes, hypertension, heart disease and arthritis, which require long-term medication use. While medications are essential for managing these conditions, taking multiple drugs can be complicated and the risk of adverse effects and interactions increases significantly. Polypharmacy is also prevalent in patients with mental health disorders, such as depression and anxiety, who may be prescribed medications by various specialists. Patients may also be prescribed Over-The-Counter (OTC) drugs and supplements, which can exacerbate the risks associated with polypharmacy.

Pharmacists play an essential role in reducing the risks of polypharmacy by ensuring safe and effective medication use. As experts in pharmacology, they possess the knowledge needed to evaluate complex medication regimens and make recommendations that can prevent or address potential issues. Pharmacists conduct thorough medication reviews to ensure that each medication a patient is taking is necessary, appropriate and does not interact negatively with others. During these reviews, pharmacists check for duplicate therapies, unneeded medications and potential drug interactions. They may also assess whether any medications should be discontinued or replaced with alternatives to minimize risks.

One of the key responsibilities of pharmacists is educating patients about their medications. Pharmacists explain how each

medication works, potential side effects, and how to take them correctly. This helps improve medication adherence and reduces the risk of errors. Pharmacists also educate patients on the importance of discussing any OTC drugs or supplements they may be taking to avoid harmful interactions with prescribed medications. Pharmacists often provide Medication Therapy Management (MTM) services, which involve assessing a patient's entire medication regimen and collaborating with other healthcare providers to optimize treatment. MTM aims to ensure that medications are working as intended, improve patient outcomes and reduce unnecessary treatments or dosages. This is particularly important in managing polypharmacy, as it requires a holistic, patient-centered approach to medication management.

Managing polypharmacy requires ongoing monitoring. Pharmacists track patients' progress, check for new side effects, and adjust medications as needed. For example, they may recommend blood tests to monitor drug levels or organ function, especially for drugs that require close monitoring, such as anticoagulants or diabetes medications. Pharmacists also follow up with patients regularly to ensure they are adhering to their prescribed regimen and to identify any emerging issues. In some cases, pharmacists can help simplify a patient's medication regimen by recommending combination medications or adjusting the timing of doses. For example, combining two medications into one pill or changing the dosing schedule to once a day instead of multiple times can make it easier for patients to adhere to their treatment plans.

Pharmacists work closely with doctors, nurses and other healthcare providers to ensure that the patient's entire treatment plan is well-coordinated. If a pharmacist identifies a potential issue with a patient's medications, they can alert the prescribing physician and recommend alternatives. This collaborative approach is especially important in polypharmacy management, where patients are often receiving care from multiple specialists.

## CONCLUSION

Polypharmacy is a growing challenge in healthcare, particularly as the population ages and the prevalence of chronic conditions rises. While it is often necessary to manage multiple health

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issues, the risks associated with polypharmacy are significant and cannot be neglected. Pharmacists are uniquely positioned to address these risks, providing valuable medication reviews, education, monitoring, and collaboration with other healthcare

providers. By ensuring that medication regimens are optimized, pharmacists help improve patient outcomes, reduce healthcare costs and ultimately enhance the safety and well-being of patients managing complex medication regimens.