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Perspective

Effectiveness of Pharmacist-Led Counseling in Reducing Polypharmacy Risks in Geriatric Patients

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DESCRIPTION

Polypharmacy, commonly defined as the simultaneous use of five or more medications, is a growing concern in geriatric care, particularly due to its association with increased risks of adverse drug reactions, medication non-adherence, hospitalizations, and reduced quality of life. As the elderly population continues to expand in Portugal and globally, healthcare systems face escalating challenges in managing complex medication regimens safely and effectively. Pharmacist-led counseling has emerged as a practical and impactful approach to mitigate these risks, given pharmacists' accessibility, clinical expertise, and patient-centered roles. This study aimed to evaluate the effectiveness of pharmacist-led interventions in reducing inappropriate polypharmacy and improving medication safety among elderly patients in community and institutional care settings across northern Portugal.

A six-month prospective study was conducted involving 180 geriatric patients aged 65 and above who were identified as being at risk for polypharmacy-related complications. Participants were recruited from community pharmacies, nursing homes, and outpatient clinics. A team of trained clinical pharmacists carried out initial comprehensive medication reviews, identifying drug duplications, potential drug-drug interactions, and instances of unnecessary or suboptimal therapy. In collaboration with prescribers, pharmacists proposed medication adjustments and subsequently provided individualized counseling sessions focused on medication understanding, proper administration, and adherence strategies.

Baseline data indicated that over 72% of the patients were taking more than six medications daily, with common conditions including hypertension, diabetes, arthritis, depression, and heart failure. The most frequently observed problems were therapeutic duplications, contraindicated combinations, and the use of medications listed on the Beers Criteria, an American tool widely referenced in Europe to identify potentially inappropriate medications in older adults. Patient understanding of their medication regimens was initially low, with nearly half unable to correctly identify the purpose or dosing schedule of all prescribed drugs.

Following pharmacist-led interventions, a significant reduction in the average number of medications per patient was observed from 7.3 at baseline to 5.6 at the three-month follow-up. Deprescribing strategies were implemented with caution, ensuring that discontinuation of any drug did not compromise therapeutic goals. Importantly, 64% of the patients reported improved clarity about their medications, and adherence improved as measured by the Morisky Medication Adherence Scale (MMAS-8). The pharmacists also provided written medication schedules and educated caregivers where necessary, ensuring sustained behavioral change and medication management support.

Patient safety outcomes were also notable. The incidence of self-reported adverse drug events decreased from 18% to 9% post-intervention, and there was a 30% reduction in medication-related emergency department visits compared to the same period in the previous year. Patients expressed high levels of satisfaction with the counseling sessions, citing increased confidence in managing their medications and appreciating the opportunity to ask questions in a relaxed, non-judgmental environment. Prescribers who collaborated with pharmacists acknowledged the value of their input, particularly in identifying issues that often go unnoticed during routine consultations.Another key observation was the positive shift in the pharmacist-patient relationship. The study emphasized the importance of continuity of care, with many participants continuing follow-up appointments even after the study period ended. Pharmacists in community settings noted that routine counseling has now been integrated into their standard services for elderly customers, highlighting a cultural shift in pharmacy practice from dispensing-centered to patient-focused care.

Challenges encountered included initial resistance from some prescribers regarding medication adjustments, particularly in cases involving long-term prescriptions initiated by specialists. However, once the clinical rationale and safety concerns were explained, interdisciplinary cooperation improved. A lack of

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reimbursement structures for cognitive pharmacy services also posed a barrier, limiting the scalability of such interventions across Portugal's healthcare system. Nonetheless, the study advocates for policy changes that recognize and fund pharmacist-led counseling services, especially in geriatric care.

CONCLUSION

In conclusion, the findings of this study reinforce the critical role that pharmacists can play in addressing the complexities of polypharmacy among elderly patients. Through structured medication reviews, patient counseling, and collaborative deprescribing, pharmacist-led interventions significantly improved medication safety, reduced adverse events, and enhanced patient adherence. As Portugal's healthcare system continues to adapt to the needs of an aging population, integrating pharmacists more fully into geriatric care teams offers a cost-effective and impactful solution to polypharmacy-related challenges. Expanding these services nationwide, supported by policy and reimbursement mechanisms, has the potential to substantially improve outcomes for one of the most vulnerable patient groups in the healthcare continuum.