



# Polypharmacy and Medication Management in Elderly People

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## DESCRIPTION

Polypharmacy in the elderly is an important aspect of public health around the world and an important focus of integrative medicine. Polypharmacy, multiple medications or the use of more than medically necessary medications can lead to adherence problems in older patients, especially those who do not live in nursing homes. Therefore, there is an urgent need to address this growing problem of the elderly population. About 44% of men over the age of 65 and 57% of women take 5 or more OTC and prescription drugs per week, and 12% of individuals in this age group take 10 or more OTC and prescription drugs per week.

Patients with respiratory problems and pre-existing coronary artery disease take 6-9 medications to reduce the long-term risk of further complications and secondary coronary events it is not uncommon to do. In fact, strict adherence to national treatment guidelines for such patients results in at least six simultaneous prescription drugs. With negative results, polypharmacy becomes a problem.

Young adults with chronic pain such as fibromyalgia and developmental disorders, especially young adults with comorbidity, may experience polypharmacy with multiple treatments and modality. Other symptoms associated with Polypharmacy in younger patients include diabetes, heart disease, stroke and cancer [1].

As the population ages, the healthcare system faces an increasing burden of chronic illness and rising prescribing costs. In elderly patients with Polypharmacy, dosing management is a careful consideration process and should be adjusted regularly based on therapeutic effect and changing conditions. Due to the non-uniformity of patient groups and the limited scope of current guidelines, it is difficult for general practitioners to establish routines.

Polypharmacy is not always recommended, but in many cases it can lead to negative consequences and diminished therapeutic effectiveness, often because it is more harmful than good or too less profitable. The risk is too great. Therefore, medical

professionals believe that it is a situation that needs to be monitored and reviewed to verify that all medications are still needed. Concerns about polypharmacy include increased side effects, drug interactions, prescribing cascades and increased costs. Polypharmacy is often associated with poor quality of life, such as poor motility and cognitive ability [2-4].

Whether the benefits of polypharmacy (compared to taking individual medications or monotherapy) outweigh the shortcomings and risks depends on the individual combination and diagnosis in each individual case. Taking multiple medications, even for relatively simple illnesses, is not an indicator of inadequate treatment and does not necessarily mean that you are taking overdose. In addition, pharmacology generally recognizes that it is not possible to accurately predict the side effects or clinical effects of a drug combination without testing the particular drug combination in the subject.

Knowledge of the pharmacological profile of the individual drug in question does not guarantee an accurate prediction of the side effects of these drug combinations. Due to genome-specific pharmacokinetics, the effects also vary from person to person. Therefore, deciding whether to reduce the list of medicines and how to reduce is often not easy and requires the experience and judgment of a practitioner. However, such thoughtful and wise reviews are due to issues such as poor management of the transitions of care (usually poor continuity of care due to information silos), overworked physicians, and interventionism. In addition, it is an ideal that very often fails to be realized [5].

Polypharmacy is usually considered undesirable, but in certain situations it may be appropriate to prescribe multiple medications and may be therapeutically beneficial. "Proper Polypharmacy" is described as prescribing complex or multiple medical conditions in a way that maximizes the medication needed to maintain safety and well-being. Polypharmacy is clinically indicated for several disorders, including diabetes, but should be discontinued if the prescription drug's efficacy no longer outweighs the potential for harm [6].

In many cases, certain medicines can actively interact with other medicines when prescribed together to produce greater effect

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than either medicine alone. This is especially noticeable in the areas of anesthesia and pain management. Antiepileptic drugs, antidepressants, muscle relaxants, NMDA antagonists and other medicines are combined with more typical analgesics such as opioids, prostaglandin inhibitors and NSAIDs. The practice of the synergistic effect of this drug to treat pain is known as the analgesic effect [7].

Polypharmacy is best recognized by the elderly because patients with one or more chronic illnesses have a long dosing list. Elderly people with multiple disciplines and no family doctor are particularly vulnerable to polypharmacy. Adults living in long-term care facilities are also at risk because they are more vulnerable than outpatients and have multiple medical and cognitive impairments that often require pharmacological treatment. Up to 91% of long-term care patients take at least 5 medications daily.

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