

## Faculti Summary

<https://faculti.net/addressing-polypharmacy/>

This video discusses polypharmacy, which is defined as the concurrent use of multiple medications, typically five or more per day. It is particularly prevalent among individuals on hemodialysis, who average 12 medications daily. Chronic kidney disease patients are at higher risk for polypharmacy due to various comorbidities and complicated healthcare interactions.

This video explains the “prescribing cascade,” where adverse effects of a medication are mistaken for new conditions, leading to further prescriptions and exacerbating polypharmacy. The consequences of polypharmacy include adverse drug reactions, drug interactions, poor medication adherence, cognitive impairment, increased emergency visits, and higher healthcare costs.

To address these issues, the concept of de-prescribing is introduced, which involves the systematic process of reducing or discontinuing medications that pose risks or are no longer beneficial. A pilot study was implemented in a hemodialysis unit in Toronto, where specific de-prescribing algorithms for certain medications (e.g., alpha blockers, loop diuretics, statins) were developed and validated. The study demonstrated that these algorithms were safe and effective in reducing polypharmacy.

Building on this, additional medications were added to the de-prescribing regimen, and patient-centered tools were created to engage patients in the process. The initiative aims to expand this de-prescribing program to more hemodialysis units across Canada, assessing its effectiveness using the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance). The ultimate goal is to integrate de-prescribing into routine practice for improving the quality of life for patients on multiple medications, ensuring better medication management across various populations, including transplant patients and those in kidney care clinics.