



PhD student:

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Research project:

Quaternary prevention in general practice and primary care: enhancing knowledge, skills, and attitudes in medication review and deprescribing in older adults with multimorbidity and polypharmacy

Abstract:

Introduction

The increasing use of multiple medications among older adults poses a significant public health challenge, particularly in high-income countries where people live longer and often coexist with chronic conditions for extended periods. To address this issue, healthcare professionals must regularly review pharmacological treatments, discontinue those that are unnecessary, and ensure that the remaining therapies are both safe and effective. Reducing inappropriate medications helps to lower the risk of adverse drug reactions, prevent hospitalizations, improve quality of life, and reduce healthcare costs. General practitioners (GPs) play a key role in this process. They work closely with patients and often serve as their main point of contact for care. During routine consultations, GPs can assess ongoing treatments, identify medications that are no longer beneficial, and discontinue potentially harmful ones. Thanks to their comprehensive knowledge of the patient's clinical history, GPs are ideally positioned to guide and tailor this process to the patient's individual needs and priorities. Although training interventions have often been implemented to improve therapeutic appropriateness and support deprescribing in older adults, evidence of their effectiveness in the general practice setting remains limited. Furthermore, GPs' knowledge, skills, and attitudes toward medication review and deprescribing in the context of multimorbidity and polypharmacy are still underexplored and not well understood. Main objective To assess and improve general practitioners' knowledge, skills, and attitudes regarding medication review and deprescribing in older patients with multimorbidity and polypharmacy.

Methods

The study is structured into four complementary and integrated phases:

- Systematic review aimed at synthesizing existing evidence on the effectiveness of educational programs for general practitioners to improve medication appropriateness and deprescribing in older adults with multimorbidity and polypharmacy.
- Cross-cultural adaptation and validation of a psychometric instrument to assess GPs' attitudes towards deprescribing, using the Delphi method with a panel of experts, followed by an analysis of validity and reliability.
- Multicenter cross-sectional observational study to evaluate GPs' knowledge, skills, and attitudes regarding medication review and deprescribing in the context of multimorbidity and polypharmacy in Italy, using the validated instrument from the previous phase.
- Randomized controlled feasibility study to assess the feasibility of an educational program for general practitioners focused on improving therapeutic appropriateness and deprescribing in older patients with polypharmacy.



Expected results

The project aims to generate knowledge useful for designing targeted educational programs, based on validated tools, to support GPs in managing complex pharmacological treatments. Expected outcomes include: a synthesis of existing evidence on effective educational interventions; a culturally adapted and validated tool for the Italian context to assess GPs' attitudes towards deprescribing; an updated overview of GPs' competencies in this area; and a feasibility evaluation of the training program, paving the way for future large-scale implementation.