**Clinical Research Category:**

**Deprescribing medications for chronic diseases or psychiatric illness in non-terminally ill adults: a systematic review of randomized control trials**

Author: Dr. Barbara Messinger-Rapport, MD; Louis Stokes Cleveland VAMC

Background/Objective/the research question: Deprescribing may be considered the process of discontinuing drugs when existing or potential harms outweigh existing or potential benefits. Deprescribing may improve adherence and tolerability. Deprescribing may also reduce drug-drug interactions, medication errors, adverse drug reactions, as well as unnecessary cost to patients and the healthcare system. However, the benefits and harms of deprescription are not clear, and there are few chronic disease guidelines that incorporate deprescription. We systematically reviewed data from randomized controlled trials to determine the feasibility and outcomes of deprescribing in the management of chronic medical or mental health conditions in non-terminally ill adults.

Methods/Study Design: We performed a comprehensive, systematic literature search which included the following keywords: deprescribing, drug discontinuation, drug withdrawal, drug taper, pharmaceutical preparations, medication management, medication review, polypharmacy, randomized controlled trial. Articles were required to meet specific inclusion criteria relevant to primary care providers caring for adults with chronic conditions.

Results/Analysis: 57 papers met the study criteria. Of those, 20 studies compared a method of deprescription with either a control or usual care. The remaining studies examined withdrawal of a medication or a class of medications for a chronic condition, specifically hypertension, diabetes, asthma, COPD, GERD, osteoporosis, heart failure, stable angina, and Parkinson’s disease.

Conclusions/Interpretations: Deprescription in high-risk individuals is feasible with careful oversight and, in the case of antipsychotics, may improve quality of life and possibly reduce mortality. The most successful interventions included both clinician education as well as patient-specific drug recommendations. However, deprescription (1) may require expensive, intensive interventions; (2) may not be durable; (3) does not always lead to expected outcomes such as improved fall rate, cognition, quality of life, or admission rate; and (4) may have unexpected adverse outcomes that affect quality of life.

Grateful acknowledgements to: Dills H, Shah K, Bradford K, Syed Q

The author states that she has no conflict of interest.