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Rather Than Prescribing—How About Deprescribing? Providing Safe Care for Patients Lost in the Maze of Polypharmacy

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POLYPHARMACY AND DEPRESCRIBING

Inappropriate prescribing includes overprescribing, misprescribing, or underprescribing.[1] Couple these actions with the estimated 15 million Americans 65 years and older prescribed 5 or more medications from multiple providers of care, there is a "perfect storm" brewing in every healthcare setting.[2] Polypharmacy and potentially inappropriate medications (PIMs) are fueling delirium, falls, frailty, cognitive decline, and hospital admissions.[3]

Deprescribing is a goal-directed strategy to minimize polypharmacy.[3] This process requires a supervised withdrawal of PIMs and/or other medications, for which potential harms or burdens outweigh the benefits.[4] Goals for deprescribing include improved patient outcome and reducing adverse events associated with PIMs and polypharmacy. Deprescribing requires patient involvement, shared decision-making, goal-directed care, and interdisciplinary collaboration.[5,6] Deprescribing may be the most important element of the prescribing process.[6]

Reasons to consider deprescribing can include the following: (*a*) medication risks now outweigh benefits; (*b*) medication is no longer appropriate or necessary; (*c*) medication is ineffective or without benefit; (*d*) medication is burdensome in adverse effects or financially; (*e*) patient adherence to therapy is poor; (*f*) medication is not congruent with patient desires related to health; and (*g*) adverse drug effects. Any medications prescribed appropriately in the past can become PIMs with changes associated with aging.[6]

Deprescribing is not easy and requires as much or more thought as prescribing a medication. To begin, the decision to deprescribe should be based on careful assessment and implications with withdrawal. In a shared decision-making process, options and patient preferences need to be explored before making the decision. Of course, the interdisciplinary team needs to be made aware of the decision as well. The team can provide crucial feedback regarding the efficacy or risks with planned withdrawal and can assist in ongoing monitoring.[7]

Barriers to deprescribing must be recognized and addressed through the decision-making process. Take in account the risk for rebound or withdrawal symptoms, inability to closely monitor the patient during the withdrawal, and unavoidable overlap of care with other providers particularly those who disagree with deprescribing. Patients and clinicians both fear changing the "status quo" and pressures exerted from practice guidelines to prescribe is real. Difficult medication reconciliation and management of polypharmacy, although incredibly important, is often not a priority during short office visits. All these factors negatively impact the deprescribing process.[6]

THE EVIDENCE FOR DEPRESCRIBING

A literature search using MEDLINE, EMBASE, CINAHL, PsycINFO, Web of Science, and the Cochrane Library examined interventional studies reporting deprescribing interventions among people aged 65+ years identified as frail. The primary outcome was safety of deprescribing practice. The total number of participants in all included studies published between 2014 and 2019 was 657, with sample sizes ranging from 46 to 17 and an age range of 79 to 85 years. Studies were conducted in Ireland, Belgium, New Zealand, Canada, and Israel. Studies were heterogeneous with regard to settings, designs, and outcomes, which made it difficult to propose definitive conclusions. Findings from this very small sample of studies suggest that deprescribing is safe and feasible and may provide important benefits. Deprescribing interventions were correlated with significant reductions in the number of medications and PIMs and possible improvements in function, frailty status, mental health, and depression.[8]

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In a small UK study, 75 patients and 76 caregivers participated in a study exploring the desire of patients and caregivers to be involved in medicine decision-making and to identify attitudinal predictors of desire to try stopping a medicine. A significant number of patients and caregivers did not want to be involved in medication decision-making, and neither patients nor caregivers perceived deprescribing as withdrawal of care as some feared. These observations suggest that practitioners should perhaps watch for deprescribing opportunities.[9]

Limited evidence suggests that deprescribing in geriatric inpatients may be correlated with reduced readmission 3 months postdischarge and unplanned hospital admissions.[5,10] However, further research is needed with larger sample sizes and control of confounding factors not controlled for or addressed in the analysis. Methods used for deprescribing, management of drug withdrawal, reversal of drug-drug interactions, and provision of alternative therapies need to be addressed in the research design and reporting.[3]

A recent randomized clinical trial (Shed-MEDS) explored the impact of a pharmacist- or nurse-led patient-centered deprescribing intervention for older adults at discharge, post–acute care (PAC), and discharge and at 90 days' follow-up. For older adults transitioning from hospitalization to PAC, the intervention group received a pharmacist or nurse practitioner comprehensive medication review and deprescribing recommendations for the patient or surrogate. The deprescribing action began in the hospital and continued throughout the PAC stay. The control group received usual care at the hospital and PAC facility. Patients randomized to the deprescribing intervention for polypharmacy had significantly fewer medications compared with the control group who received usual care at the PAC facility, at discharge, and at 90 days, and findings suggested that deprescribing was safe and effective in reducing medication burden and PIMs. There were no increases in emergency department visits, hospitalizations, or mortality with deprescribing.[11]

IMPROVING DEPRESCRIBING IN ADVANCED PRACTICE

With the rise in prescriptive authority in nursing, it is disturbing to find a significant gap in the literature that describes nurses and the deprescribing process. Elements required for safe deprescribing require knowledge of pharmacodynamics and pharmacokinetics in aging for safe management of polypharmacy in older adults. Education should drive competency in assessing for adverse drug effects, uncovering burdens with medication therapy, deprescribing processes, and safe monitoring of drug withdrawal. All of these competencies require practice in a multidisciplinary environment. Further development is needed in the education of prescribers on how to safely deprescribe to drive favorable patient outcomes.[12] Also needed are clinical decision support systems to manage polypharmacy and recognize PIMs. Interventions to improve real-time communication between specialists and general practitioners when new medications are initiated or discontinued are also needed.[3]

MOVING FORWARD

The 3 diagnostic factors needed to deprescribe a medication are the perceived necessity of the medicine, appropriateness of the number prescribed medications, and a desire for dose reduction. Deprescribing requires an accurate medication history and ongoing monitoring of responses to medication withdrawal. An admission to hospital where these 2 activities are routine provides an opportunity to develop a deprescribing intervention.[13]

Powerful resources to learn more about deprescribing include first the US Deprescribing Research Network at https://deprescribingresearch.org/, which is funded by the National Institute on Aging grant R24AG064025. Second, check out the American Geriatrics Society 2019 updated AGS Beers Criteria for PIM use in older adults.[14]

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