The Danger of Inadequate Prescribing Education

Most Americans see the use of multiple medications as a natural part of aging, and drugs can offer patients many benefits. But each additional drug a person takes increases the risk of suffering serious, sometimes even deadly harm. Every day, 750 Americans age 65 and older are hospitalized due to a serious side effect associated with taking multiple medications. Despite the well-documented harms of medication overload, many health care professionals are not trained in how to avoid overprescribing or how to pause or stop medications.

Most health professionals are not taught to look beyond clinical guidelines, to tailor prescribing to the unique circumstances of individual patients. They often do not analyze the potential harms as well as benefits of medications before prescribing. Furthermore, with the exception of geriatric rotations, trainees get little instruction on how to adjust treatment for the needs of older adults. This lack of training in undergraduate, graduate (residency) and post-graduate/continuing education for health professionals often results in clinicians who may routinely overprescribe and feel underqualified to adjust or discontinue medications, leaving their patients vulnerable to harm.
Medication overload occurs when a person is taking multiple medications that may pose a greater chance of harm than benefit.

Harm from medication overload includes delirium, falls, strokes, and other events that can be life-threatening.

**The Threat of Medication Overload and Adverse Drug Events (ADEs)**

- 5 million older adults sought medical attention for ADEs in 2018
- 42% of older adults take 5 or more prescription medications
- There was a 200% increase in polypharmacy over 20 years
- 280,000 hospitalizations in 2018 due to ADEs
- $62 billion in preventable hospitalizations over 10 years
- 150,000 premature deaths in next 10 years due to ADEs

**Improve Training**

Improvements must be made in health professionals' education curricula to teach them to avoid medication overload and adverse drug events, and increase their competency in deprescribing, or discontinuing medications. Clinicians should be taught to conduct prescription checkups, recognize when medications are harming or no longer benefitting patients, and how to safely taper or stop them. It is important for all health professionals to recognize the need for different prescribing and dosing for older patients with multiple chronic conditions. Training must also teach clinicians how to engage in shared decision making conversations with patients and family members about medications and health goals, as well as how to communicate medication concerns with other health professionals. Curricula should highlight the potential risks and side effects associated with commonly prescribed medications and when it is appropriate to offer non-pharmacological treatments.
Enhance Continuing Education

Few clinicians currently in practice have received sufficient training in avoiding overprescribing and discontinuing medications. Therefore, training on patient-centered prescribing and deprescribing should be incorporated into continuing education (CE) activities related to medication use. CE requirements vary by state and profession, but all clinicians have to complete a certain amount of CE hours per year to maintain their licenses. To avoid conflicts of interest and biased information in CE, new CE activities in the form of in-person seminars, case conferences, online modules, academic detailing, or podcasts should be created without reliance on pharmaceutical industry funding.

Take Action to Eliminate Medication Overload

Implementing these improvements in health professionals’ education will require collaboration with organizations that oversee curricula design like the Association of American Medical Colleges or the American Association of Colleges of Nursing. Additionally, support from professors, student organizations, senior clinicians, and deprescribing networks will be crucial to help persuade teaching institutions to adopt the changes. To generate CE activities on appropriate prescribing and deprescribing, clinicians and researchers will need to develop and test content, and have the approval of organizations such as the Accreditation Council for Continuing Medical Education. Support from specialty societies and state licensing boards will be important for wide enactment of these new educational improvements. Without making careful prescribing and deprescribing a greater priority in education and training for all health professionals, medication overload and barriers to deprescribing will persist—leaving millions of older Americans at risk of serious harm.