Pharmacist-based deprescribing successfully reduced older adults' exposure to anticholinergic drugs

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Anticholinergics, a class of drugs frequently prescribed for depression, urinary incontinence and many other conditions common in older adults, affect the brain by blocking acetylcholine, a nervous system neurotransmitter which influences memory, alertness and planning skills. A new study from Regenstrief Institute, Purdue University College of Pharmacy and Indiana University School of Medicine researchers has found that using pharmacists as deprescribing care coordinators decreased prescription of anticholinergics by 73 percent and reduced cumulative use of these drugs by as much as 70 percent.

"Our new study is important, necessary preliminary work, enabling us to test whether deprescribing these drugs improves clinical outcomes," said Regenstrief Institute and Purdue College of Pharmacy faculty member Noll Campbell, PharmD, M.S., who led the new study to develop pharmacist-centric delivery models to successfully switch patients to safer drugs. "Tackling deprescribing has not been easy. That pharmacist-centric deprescribing models work so well does not surprise me because pharmacists are well suited for the task. They are knowledgeable about medications, often have a close relationship with the patients and are well trained to communicate with providers."

The researchers developed two pharmacist-focused deprescribing models. One, a face-to-face model involved pharmacists meeting with and monitoring older adult patients being seen in an aging brain care clinic. The second model, which involved pharmacist outreach via telephone to a generally older adult patient population encouraging safer medications, was less effective in diminishing exposure to anticholinergics but more effective than other methodologies, including clinician alerts in electronic health records (EHRs). Collectively, these models decreased prescription of anticholinergics by 73 percent and reduced cumulative use of these drugs by as much as 70 percent.

The research is published in the *Journal of the American College of*

Clinical Pharmacy.

Using the human-intensive deprescribing methodologies described in the JACCP paper, Regenstrief researchers are currently conducting R2D2—an acronym for "Reducing Risk of Dementia through Deprescribing" to determine whether the adverse cognitive effects of anticholinergic medications are reversible. In this study, which is currently recruiting patients, clinical pharmacists are working with physicians and their patients who are using anticholinergics to identify and switch to safer alternative medications. The trial also monitors the effect of deprescribing these medications on depression, anxiety, pain, insomnia, and quality of life.

More information: Noll L. Campbell et al, Deprescribing Anticholinergics in Primary Care Older Adults: Experience from Two Models and Impact on a Continuous Measure of Exposure, *Journal of the American College of Clinical Pharmacy* (2022). DOI: 10.1002/jac5.1682

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