Medication organization devices tied to adverse effects

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(HealthDay)—Medication organization devices (MODs) may cause

medication-related adverse events in unintentionally nonadherent older people, according to a study published online July 5 in *Health Technology Assessment*.

Debi Bhattacharya, Ph.D., from the University of East Anglia in the United Kingdom, and colleagues conducted a systematic review and focus groups with patients, caregivers, and health care professionals to inform the design of a randomized controlled trial to evaluate clinical effectiveness and cost-effectiveness of MODs. The study design was evaluated using participants who were older than 75 years and prescribed at least three solid oral dosage form medications.

The researchers found that MOD studies are largely of poor quality and that the relationship between adherence and health outcomes is unclear. The pre-trial focus groups altered the planned study design by suggesting a minimum recruitment age of 50 to 60 years. Of the patients who completed the baseline questionnaire, 35.4 percent were excluded because of pre-existing use of an MOD. The rate of intentional nonadherence was 24.7 percent. Of the remaining 76 participants, 46.1 percent were unintentionally nonadherent. In the MOD study arms, five adverse/serious adverse events were reported, compared with none in the control arms.

"A study examining the association between MOD initiation and adverse effects is necessary and a strategy to safely introduce MODs should be explored," the authors write.

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