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COMMENTARY

Improving psychotropic medication use among persons with dementia

The use of psychotropic medication among persons with dementia (PWD) both in nursing home (Wetzels *et al.*, 2011) and community settings (Maust *et al.*, 2016) far exceeds what might be expected based on their limited evidence for benefit (Kales *et al.*, 2015). This relatively high use persists despite years of evidence about the potential harms associated with their use in older adults generally and PWD in particular (e.g. Wang *et al.*, 2001; Schneider *et al.*, 2005). However, the solution to relatively high psychotropic use is not to end all psychotropic use, as there are individual patients for whom use of such medication is appropriate. For example, a policy that defines all antipsychotic use as inappropriate may simply lead to increased use of alternatives with even less evidence of benefit, as suggested by the response to antipsychotics' black box warning in the United States (Kales *et al.*, 2011).

The paper in this month's issue by van der Spek and colleagues (van der Spek *et al.*, 2016) presents an important step forward in our ability to help define the "right" amount of psychotropic medication use among PWD. They use the Appropriate Psychotropic drug use In Dementia (APID) index to review medication use on the following seven domains of appropriateness: indication, evaluation, dosage, drug–drug interactions, drug–disease interactions, duplications, and therapy duration. Among 559 PWD living in 44 different dementia special care units, just 9.6% of psychotropic use was fully appropriate. With 14.4% considered fully appropriate, antidepressants were the class *most* appropriately prescribed, while antiepileptics were most inappropriately used (0% appropriate). The domains of indication, evaluation, and duration accounted for 89.5% of overall inappropriateness: 35.8% of medications had no indication, and over one half had no evidence of evaluation.

The APID index provides a potentially useful approach for facilities and providers to address medication use among PWD. Rather than taking a blanket approach where all psychotropic use or all use of a particular class among PWD is deemed inappropriate, using APID could help a facility identify either particular medications or particular domains as problematic. For example, while van der Spek and colleagues identified antidepressant use as the most appropriate, antidepressants benefited from scoring 100% appropriate on therapy duration, as there is not a maximum therapy duration according to drug formularies. This artificially high score for antidepressants on this domain masked the fact that antidepressants scored next to last for appropriateness of indication, consistent with prior findings that antidepressant use among older adults frequently lacks a clear indication (Maust *et al.*, 2011; Wiechers *et al.*, 2014). A facility may find that interventions that specifically limit prescribing to specific documented indications for several classes may be the most meaningful way to reduce inappropriate medication use overall.

While potential application of the authors' approach in nursing home settings is relatively straightforward, use in community settings may be more challenging. However, this is a pressing need, as the majority of psychotropic use occurs among PWD in community settings (Maust *et al.*, 2016). Finally, any intervention to reduce psychotropic use among PWD will be far more likely to succeed where there are alternative environmental and psychosocial interventions in place, with a structured approach such as DICE that guides their use (Kales *et al.*, 2014).

Conflict of interest

None.

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References

Kales, H. C., Gitlin, L. N. and Lyketsos, C. G. (2014). Management of neuropsychiatric symptoms of dementia in

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clinical settings: recommendations from a multidisciplinary expert panel. *Journal of the American Geriatrics Society*, 62, 762–769.

Kales, H. C., Gitlin, L. N. and Lyketsos, C. G. (2015). Assessment and management of behavioral and psychological symptoms of dementia. *BMJ*, 350, h369–h369.

Kales, H. C. *et al.* (2011). Trends in antipsychotic use in dementia 1999–2007. *Archives of General Psychiatry*, 68, 190–197.

Maust, D. T., Langa, K. M., Blow, F. C. and Kales, H. C. (2016). Psychotropic use and associated neuropsychiatric symptoms among patients with dementia in the USA. *International Journal of Geriatric Psychiatry*. Epub ahead of print. doi: 10.1002/gps.4452.

Maust, D. T. *et al.* (2011). Telephone-based behavioral health assessment for older adults starting a new psychiatric medication. *American Journal of Geriatric Psychiatry*, 19, 851–858.

Schneider, L. S., Dagerman, K. S. and Insel, P. (2005). Risk of death with atypical antipsychotic drug treatment for dementia: meta-analysis of randomized placebo-controlled trials. *JAMA*, 294, 1934–1943.

van der Spek, K. *et al.* (2016). Only 10% of the psychotropic drug use for neuropsychiatric symptoms in patients with dementia is fully appropriate. The PROPER I-study. *International Psychogeriatrics*. Epub ahead of print. doi:10.1017/S104161021600082X.

Wang, P. S., Bohn, R. L., Glynn, R. J., Mogun, H. and Avorn, J. (2001). Hazardous benzodiazepine regimens in the elderly: effects of half-life, dosage, and duration on risk of hip fracture. *American Journal of Psychiatry*, 158, 892–898.

Wetzels, R. B., Zuidema, S. U., de Jonghe, J. F. M., Verhey, F. R. J. and Koopmans, R. T. C. M. (2011). Prescribing pattern of psychotropic drugs in nursing home residents with dementia. *International Psychogeriatrics*, 23, 1249–1259.

Wiechers, I. R., Kirwin, P. D. and Rosenheck, R. A. (2014). Increased risk among older veterans of prescribing psychotropic medication in the absence of psychiatric diagnoses. *American Journal of Geriatric Psychiatry*, 22, 531–539.

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