

Management Tips and Traps:

Managing co-morbid disease in persons with dementia

Series 5: Non-adherence to medication

Background

Adherence to medication is vital for disease management while simultaneously reducing healthcare expenditure. Effective management of chronic comorbid conditions often involves complex medication regimens, requiring different tablet combinations and multiple daily dosing.

There is a high rate of non-adherence to medication regimens, particularly in patients with chronic conditions. Fortunately, adherence may be improved through a combination of patient educational and behavioural interventions.

Older people are at risk of non-adherence due to a normal decline in dexterity, mobility, hearing and vision; however, impaired cognitive function may exacerbate these effects.

A deficit in cognitive processes due to dementia predisposes older adults to medication non-adherence by impairing abilities in planning, organising and executing medication management tasks.

Adherence is worse when compared to cognitively intact populations.

Tips: to do

1. Dementia awareness is key to tailoring management

The impact of dementia on a patient's ability to self-manage varies according to the cognitive domain(s) affected, severity of impairment, and complexity of the self-management task(s).

The functions of multiple cognitive domains are required to adhere to medication regimens as this task involves obtaining and accessing medications, understanding directions, scheduling intake, adjusting schedules, planning continuous access to medication and problem-solving missed doses.

A comprehensive understanding of the influence of all cognitive domains on non-adherence is necessary for clinicians to improve care.

Note that there is a negative correlation between physician rating and patient's ratings of medication treatment adherence.

2. Understanding factors associated with adherence and non-adherence

The impact of other individual factors apart from a diagnosis of dementia reported include: a person forgetting; lower scores in cognitive domain test indicative of deficits; depression; inadequate self-care confidence; lower level of education, number of prescription medications, concern about taking prescribed drugs and intentional noncompliance.

Importantly, a poor client-physician relationship is an independent predictor of poor adherence.

The most frequently reported risk factors for medication nonadherence were cognitive impairment and an absence of a caregiver or spouse living with the patient.

3. Screening for cognitive impairment

The impact on adherence begins early with mild cognitive impairment (MCI). This is an important factor for clinical practice as the presence of MCI is easily missed.

Screening for cognitive impairment is important in determining if this is contributing to a failure to respond to therapy (perhaps due to not taking medication) or presence of adverse effects (perhaps due to inadvertent and inappropriate over dosing).

Traps: to avoid

1. Expecting simplistic approaches to be a solution to a complex problem

The empirical evidence of benefit for the use of technological intervention and assistive devices is mixed. The most common assistive system was the specific placement of medications to trigger memory.

The use of video monitoring interventions demonstrates some benefit.

2. Continuing complex regimens when de-prescribing would be better

A significant number of people with dementia have a comorbid health condition. Regimen complexity and the number of prescribed medications are risk factors for medication non-adherence.

The presence and management of comorbidity increase and complicate medication intake.

Patients with multiple chronic diseases may vary their opinions about health outcomes, such as, longer survival, prevention of disease-specific events, physical and cognitive function and tolerable risk of adverse drug reaction.

The difficulty for clinical practise is to rationally prescribe medications for older adults with multiple chronic conditions and reduced life expectancy whilst also analysing: the likelihood of benefit and goals of care and satisfying the basic principles of optimal medication use.

3. Use of traditional rather than tailored patient education in mild dementia

Interventions focusing on traditional models of patient education may fall short in this patient population as they may not be able to understand, retain or follow instructions.

This is especially so for those people with executive deficits as it seems that mental flexibility, including implementing, planning and maintaining intentions, may be important for medication adherence.

4. Over reliance on care-givers rather than promoting independence in mild dementia

A recurring theme is the importance of caregivers for the success of interventions. This, however, reinforces the dependency of older people with dementia and is inconsistent with the philosophy of promoting self-determination and independence critical to a person's quality of life.

References

Smith D, Lovell J, Weller C, Kennedy B, Winbolt M, Young C, Ibrahim JE. A systematic review of medication non-adherence in persons with dementia or cognitive impairment: Medication non-adherence & Dementia or Cognitive Impairment. PLOS ONE. 2017 in press.

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Resources about dementia

Dementia Training Australia:

https://www.dementiatrainingaustralia.com.au

Alzheimer's Australia: https://www.fightdementia.org.au

Dementia Support Australia: http://dbmas.org.au

Acknowledgements

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