



Management Tips and Traps: Managing co-morbid disease in persons with dementia

Series 2: Heart Failure

Background

Cognitive impairment in persons with heart failure (HF) can adversely impact health outcomes, contributes to poor engagement in self-care and increased mortality.

Optimal self-care is considered an important non-pharmacological aspect of HF that may stabilize symptoms and improve health outcomes.

Key self-care behaviours important in HF include navigating and adhering to:

- Prescribed HF therapies including medications
- Dietary sodium and fluid restrictions
- Exercise programs
- Monitoring of symptoms and signs with appropriate responses

It is critical for HF patients to be able to recognize and manage changes in symptoms and health advice when such changes occur.

Dementia negatively affects a person's ability to engage in effective self-care behaviours. This includes initiating appropriate responses to changes in HF symptoms and adhering to multiple lifestyle and treatment regimens.

Ability to self-care may be predicted by patients' cognitive ability to respond to vital cues and initiate appropriate actions. Unfortunately, cognitive impairment and ability to self-care is frequently overlooked, whereby poor engagement in HF self-care is assumed to be due to poor motivation and/or poor compliance (Cameron, 2015).

The most frequently impaired domains in persons with HF include attention, memory, concentration, learning, executive functioning and psychomotor speed (Bennett, 2003).

Tips: To Do

1. Dementia awareness is key to tailoring management

A clinician's assessment of cognitive function may influence the course of HF management. Regular screening for cognitive impairment may provide information about self-care behaviors such as medication management and/or adherence.

Early identification of cognitive deficits can provide insight into these patients' ability to implement treatment plans accurately, consistently and reliably as well as highlight areas in which they may need support (Wolfe et al., 2006; Hjelm et al., 2015; Lavery et al., 2006).

Better management may improve outcomes such as reducing re-admissions to hospital, preventing unnecessary and potentially distressing hospital admission with its associated risk of problems such as delirium and falls whilst also yielding savings of hospital resources and social costs.

Staff caring for HF patients who display deficits in cognitive domains of memory, attention and/or have illness management problems may consider referral for formal neuropsychological testing (Wolfe et al., 2006). Formal screening may help identify individuals who are at risk of self-management difficulty (Cameron, 2010).

2. Screen and Manage Depression

Depression may occur as part of the neural brain injury related to HF. Psychological status has been demonstrated to have an influence on self-care behaviors (Connelly, 1993) through patient perceived self-efficacy or indirectly, through effects on multiple cognitive domains including memory and executive function (Butters et al., 2004).

Furthermore, a diagnosis of depression was found to be predictive of poor conducting of daily activity abilities and self-care management (Cameron, 2009; Alosco, 2014). Furthermore, there is a relationship between self-efficacy and depression. Self-efficacy was in turn, shown to be an important factor that influences patients' motivation to upkeep physical function and engage in self-management activities (Tsay, 2002; Dickson, 2009).

Clinicians may benefit from screening for depression in patients with HF in order to prevent the associated adverse effects it may have on self-management.

3. Promote Self Confidence

Interventions that increase confidence may improve self-management in patients with cognitive impairment. This includes:

- Rewarding patients for successfully adhering to self-management behaviours
- Introducing patients to others in the same situation who are proficient at self-management
- Reassure patients that they are able to successfully complete self-care
- Provide encouragement and support for patients
- Add strategies to improve adherence such as diaries, simplified medication regimens, dosage aids and family or service provider assistance or supervision

4. Include specific information for persons with dementia in cardiac rehabilitation and education programs

Include information on basic symptom recognition and appropriate action tailored to each individual patient. These skills while implicitly understood in cognitively intact patient groups, must be explicitly taught, practiced and reinforced in HF patients to recognise and hence, prevent the recurrence of an exacerbation of heart failure (Wolfe et al., 2006; Kim et al., 2015).

Providing educational materials that are less complex than standard materials may also be useful (Bennett et al., 2003).

Traps: to avoid

1. Failure to recognise that cognitive impairment is common in HF patients

Failure to recognise cognitive impairment in older patients with HF is common. In one study, three-quarters (73%) of the sample population were chosen on the basis that they did not have a history of neurocognitive problems. In fact, this population of HF patients actually had an unrecognised cognitive impairment (Cameron et al., 2010; Hawkins et al., 2012).

2. Relying on cognitive training programs that do not have real world applicability

Recent reviews have asserted that cognitive training programs usually implement tasks that have little resemblance to those required in daily life. For instance, a working memory task such as learning a list of words may not be particularly relevant to adhering to vital HF self-management tasks such as daily weighing, monitoring sodium intake or taking prescribed medications (McDaniel et al., 2012; Cameron et al., 2015).

Cognitive training should replicate the real world needs of a patient.

3. Relying on self-reported medication adherence

Heart failure management requires knowledge about the disease as well as complex regimens.

Generally, self-reported treated adherence is limited by a patient's subjectivity, retrospective memory errors and/or social desirability.

These limitations may be even greater in persons with cognitive impairment. They may tend to over-estimate their adherence and functional ability most likely due to a lack of awareness about their deficits (secondary to impairments in domains of attention and executive functioning) (Wu et al., 2008; Wutoh et al., 2003; Alosco et al., 2012).

Objective measurement of medication adherence (e.g. electronic monitoring) or carer reported adherence maybe more worthwhile to ascertain medication adherence.

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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>

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