



# Treating dementia-related sleep deprivation with weighted blankets



## What is the focus of the research?

Conducting a real-world pilot study to determine the effectiveness of weighted blankets to treat sleep disturbances in people living with dementia.



## Why is it important?

Sleep disturbances are common in people living with dementia and the consequences can be serious. Sleep deprivation contributes to disease progression and significantly reduces quality of life by exacerbating the severity of other symptoms, including agitation, behaviour changes, confusion, anxiety and wandering. This also takes a toll on the physical and emotional wellbeing of carers and is associated with increased rates of institutionalisation.

Dementia-related sleep disturbances are a major problem in residential aged-care facilities. Clinical guidelines state that non-pharmacological interventions should be first-line treatment for behavioural and psychological symptoms. However, due to the lack of effective sleep interventions, overuse and misuse of medications is widespread.

Weighted blankets are emerging as a simple method of promoting sleep. The gentle pressure they apply has been shown to reduce anxiety and increase relaxation. Preliminary research on their overnight use on nursing home residents (including people living dementia), showed improvements in sleep, daily physical activity and psychological behaviour.

However, their use in clinical settings overnight or for prolonged periods has been discouraged, due to limited knowledge about their safety and effectiveness. In this real-world pilot study, Dr Dawson will a) examine their safety and effectiveness as a sleep intervention for people who experience behavioural and psychological symptoms of dementia; b) investigate the barriers and facilitators to using weighted blankets; and c) co-design a plan for future implementation of weighted blankets across a range of settings.

If successful, weighted blankets could be an easily implemented, non-pharmacological intervention that improves sleep outcomes and quality of life for people living with dementia and their carers.



## How will this happen?

**Stage 1:** form a stakeholder group consisting of three people with lived experience of dementia to oversee the research process.

**Stage 2:** recruit 12-18 participants living in a dementia-care unit to be randomly divided into either the weighted blanket group or usual care group. The blanket group to use it overnight for six weeks, then the groups swap. Researchers to take a range of measurements, including sleep quality and duration, and medication use, to determine the blankets' impact.

**Stage 3:** hold focus groups with staff and clinicians to identify and address barriers and facilitators to implementing the blankets in clinical settings.

**Stage 4:** outline gaps in knowledge and practice about overnight use of blankets among staff.

**Stage 5:** present the findings to relevant stakeholders and co-develop protocols to use the blankets overnight in people with dementia.

**Stage 6:** collate feedback from stakeholders on the protocols to develop recommendations on implementing weighted blankets in a range of settings.



## What will it mean for people with dementia?

- A simple and effective way to improve sleep.
- Improved quality of life and fewer changed behaviours.
- Reduced stress and anxiety.
- Potential to remain living at home for longer.



## How do weighted blankets work?

Weighted blankets are a sensory modulation intervention, which means they help a person use one or more of their senses to change their emotional state. The blanket, which generally weighs about 10 per cent of a person's bodyweight, applies deep pressure to the skin (acting on the touch sensation) to promote relaxation. This sensory input travels to the brain to reduce activation of the sympathetic nervous system (our fight or flight response), and increase activation of the parasympathetic nervous system (our rest and digest mode).



## Who's undertaking the research?

### Dr Suzanne Dawson, Flinders University

Dr Dawson is a practitioner fellow in the Caring Futures Institute, Flinders University, and works in clinical practice as principal occupational therapist for the South Australian Local Health Network Mental Health Services. She is a practice-based researcher and is passionate about the implementation and evaluation of psycho-social, evidence-based practices in clinical settings. This includes a focus on co-designed, inter-disciplinary research that fosters positive changes in approaches, practices and culture in healthcare services. Dr Dawson's research is informed by the exploration of consumer, family and clinician experiences of care and seeks to improve their outcomes.

The title of Dr Dawson's project is *Weighted blankets as a nonpharmacological sleep intervention for people with behavioural and psychological symptoms of dementia: A hybrid effectiveness-implementation pilot study*.

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