





# Self-harm in people with dementia - using big data to improve outcomes and inform strategies to prevent self-harm and suicide







Diagnose

Research



Care





Treat



What is the focus of the research?

Understand the health and social circumstances of people with dementia who self-harm.



### How will this happen?

Stage 1: build and characterise a complex, population-based dataset of people with dementia who self-harm in New South Wales. Include information on sociodemographics, physical and mental health comorbidities, and pre/post self-harm service use.



**Stage 2:** explore the reverse relationship of self-harm being a predictor of dementia diagnosis by looking at people who have self-harmed and subsequently developed dementia.

**Stage 3:** determine predictors of death in people with dementia who self-harmed, by analysing their physical and mental health comorbidities and sociodemographics.

**Stage 4:** create a consult group of people with dementia (with and without a history of self-harm), family members and carers to share preliminary findings, map the potential implications, refine analyses and outputs, and plan the development of translational resources.



### Why is it important?

Coping with the stress of a dementia diagnosis can be difficult, especially knowing that despite the more than 100 forms of dementia, neither a cure nor an effective treatment have been found. Families and friends watch their loved one lose parts of themselves – their memories, their speech, their ability to perform everyday tasks – and it takes a toll on everyone. If the strain and hurt becomes too much, a person with dementia may begin to self-harm, which is not only

dangerous for the person, but devastating for a family desperately wanting to protect them. To stop people experiencing this added pain, we need to better understand the mechanisms that lead to self-harm, so that suitable suicide and self-harm prevention programs can be developed.

Research shows that the risk of self-harm and suicide are both greater for someone with dementia than without, particularly for older males. Age, physical health, mental health, and social circumstances all contribute to this, and make contact with health services in the months before self-harm common. Unfortunately, not enough is known about these healthcare pathways. More specific information could help inform prevention strategies and equip health services to meet the needs of affected individuals.

Conversely, understanding the medical experience following an incident of self-harm is also vital, as many older Australians are not referred to specialist services at this point. This is a concerning gap in service delivery, especially given that the risk of suicide in the first weeks after discharge from psychiatric hospitalisation is up to 100 times the global suicide rate, and that

older people with a hospitalisation for self-harm and depression are 14 times more likely to die within a year. Dr Reppermund will analyse the specific risk factors for people with dementia to self-harm, and the risks for people who have self-harmed to develop dementia, as these have not been explored. She will also research the clinical management of people with dementia after self-harm, so that evidence can inform a care model to prevent future self-harm and suicide.



# What will this mean for people with dementia?

- More support and preventative measures to stop people self-harming.
- A system that is more in tune to early intervention and can recognise if someone's patterns are tending towards self-harm or suicide.



## What will this mean for the health sector?

- A better understanding of the specific health problems and treatment gaps for people with dementia who self-harm.
- Better strategies for health services to meet the needs of people with dementia who self-harm.
- Evidence-based guidance to reshape health policy and services.



### ? What is self-harm?

Self-harm is where someone deliberately causes themselves pain or injury. They may burn, cut or hit themselves, starve themselves, intentionally put themselves into a dangerous situation, or abuse drugs or alcohol.

Often, self-harm is a response to distress, where the physical pain of self-harm is used to provide short-term relief from their emotional pain. Self-harm in older people is also linked to a higher risk of subsequent dementia diagnosis – something Dr Reppermund wants to know more about.

Although self-harm does not mean someone wants to die, it is one of the most common predictors of suicide.





### Who's undertaking the research?

#### Dr Simone Reppermund, University of New South Wales

Dr Reppermund is a Scientia senior lecturer in the Discipline of Psychiatry and Mental Health at the University of New South Wales. Her area of research is cognitive disorders with a focus on mental health and ageing. Dr Reppermund received her PhD in psychology from the Ludwig Maximilian University in Munich and has previously worked in the field

of depression and cognitive function.

Her current research focuses on late-life depression, cognitive impairment including dementia, everyday activities in old age, and mental health in people with intellectual disability. Through her research, Dr Reppermund aims to improve health and mental health outcomes for people with cognitive and mental disorders.