



## RACP Foundation Research Awards

### FINAL REPORT

<b>Project / Program Title</b>	Polypharmacy in elderly Australians – can deprescribing improve health related outcomes and reduce costs?	
<b>Name</b>	Dr Ingrid Hopper	
<b>Award Received</b>	2016 Vincent Fairfax Family Foundation Research Fellowship	
<b>Report Date</b>	25 June 2018	
<b>Chief Investigator / Supervisor</b>	John McNeil	
<b>Administering Institution</b>	Monash University	
<b>Funding Period</b>	Start Date:	1 October 2016
	Finish Date:	1 October 2017

#### PROJECT SUMMARY

Sleep forms part of a triad of good health, comprising diet, physical activity and sleep. It is known that sleep becomes more fragmented and lighter in the elderly, with decreased slow wave sleep (stage 3 and 4) and compensatory increases in lighter sleep (stage 1 and 2). Compared with younger people, the elderly spend more time in bed but have deterioration in the quality and quantity of sleep, which in turn can lead to excessive daytime sleepiness and daytime napping. Insomnia is a common complaint, which can be exacerbated by depression related to life events such as loss of a loved one, and medical problems such as pain from arthritis and nocturia from prostatomegaly. Medications to treat medical conditions can also disrupt sleep, and the polypharmacy that is increasingly common in this age group can also affect sleep through stimulating, sedating or diuretic effects. A number of different medications are used to treat insomnia in the elderly, and can include sedative-hypnotics, antihistamines, antidepressants, and of course alcohol. Additionally a number of primary sleep disorders are found more commonly in the elderly, including sleep disordered breathing, and restless leg syndrome/periodic limb movement, which have all been associated with increased risk of developing coronary artery disease and stroke. Sleep in the elderly is not as well studied as in middle age.

#### PROJECT AIMS / OBJECTIVES

The aims of this research are to:

- Investigate the normal range self-perceived sleep patterns in healthy, elderly Australian men and women.
- Examine the associations of self-perceived sleep and cardiovascular risk factors and cardiovascular disease.

- Examine self-perceived sleep patterns under various circumstances in the elderly, including the influence of medications to assist with sleeping, stimulant medications, diuretics, alcohol intake, different levels of pain, and the presence of comorbid medical conditions.

### **SIGNIFICANCE AND OUTCOMES**

This is the first time that a study of this magnitude (over 14,000 individuals completed the ALSOP sub-study) has examined a cohort of healthy older Australians in such detail. The size of the study means the results have adequate power to demonstrate significant associations and can indicate further hypotheses which can be investigated.

Over time, the longitudinal data will be made available, and the dataset will become richer. I will continue further with this line of research and was awarded a small grant to do so (Advancing women's research success grant).

### **PUBLICATIONS / PRESENTATIONS**

At this stage, not yet, but three manuscripts are planned, and abstracts will be submitted to cardiovascular meetings and aged care meetings.