

Monash Health: The effects of being on-call 24/7 on senior medical staff



Professor Meredith Allen,
lead researcher and paediatric
intensive care consultant

In medicine, on-call work is often required in addition to a normal working week. This means that an employee must be available and fit to return to work after hours if their employer contacts them.

On-call support provides 24/7 coverage when the volume of after hours work or specialist skill set does not justify the cost of a full shift roster.

While Professor Meredith Allen was completing her PhD in critical care, she noticed that optimising the functioning of healthcare teams was more likely to improve the outcome for critically ill children than her laboratory research.

Since then, Professor Allen has shifted her research focus to human factors, system safety and healthcare resilience. She has seen an increase in consultant-led care to improve efficiency, timely decision making and patient outcomes.

Lack of sleep impacting performance

The aim of this project is to describe in detail the burden of being on-call across a range of medical and surgical specialities, examine the impact on sleep quality and quantity, and explore the personal and professional impact of this sleep disruption.

"This research project is the first step in trying to understand the current demands on consultants in our health services and how this may impact performance," says Professor Allen.



Information gathered will add a building block to our knowledge on fatigue and optimising cognitive functioning and critical decision making in senior medical staff."

The grant provided by Avant Foundation has enabled the research to join with established sleep researchers across Australia and expand to seven health services in Victoria.

Effects of chronic sleep deprivation

Sleep plays an essential role in restorative and regulatory function and is critical to maintaining physical and mental health. Senior medical staff may face 30-plus years of sleep disruption due to being on-call.

Despite a recent focus on health professional fatigue and burnout, there is minimal to no published data on the burden of on-call for senior medical staff across disciplines, and the degree to which being on-call disrupts sleep.

"Avant Foundation grants provide the opportunity for frontline professionals in healthcare who are not part of an established research group, to undertake methodologically sound, clinically-relevant research to improve patient safety and the quality of care we deliver," explains Professor Allen.

This study is the first part of a body of work looking at sleep quality in senior medical staff in collaboration with Monash University. Understanding this data will inform future research that aims to improve the sleep patterns and quality of life in senior medical staff. And this will ultimately improve the quality and safety of the workplace.

Associate Professor Allen of Monash Health was the lead researcher of the project that received an Avant Foundation grant. She is a paediatric intensive care consultant at Monash Health and has held department, divisional and organisational lead roles in patient safety.