STRESS IN FIRE AND EMERGENCY SERVICE WORKERS OPERATING ON-CALL FROM HOME

Sarah J. Hall1,2, Brad Alsbett1, Sally A. Ferguson3, Sam J. Robertson4, Anne I. Turner1

1 Institute for Physical Activity and Nutrition, School of Exercise and Nutrition Sciences, Deakin University, Burwood, Vic, Australia.
2 Bushfire and Natural Hazards Cooperative Research Centre, East Melbourne, Vic, Australia.
3 Appleton Institute, School of Health, Medical and Applied Sciences, CQUUniversity, Adelaide, SA, Australia.
4 Institute of Sport, Exercise & Active Living (ISEAL), Victoria University, Footscray, VIC, Australia.

HOW DOES WORKING ON-CALL FROM HOME AFFECT YOUR STRESS? ARE YOU STRESSED IN ANTICIPATION TO A NIGHT CALL? ARE YOU MORE STRESSED THE DAY AFTER A NIGHT CALL?

WHAT WE KNOW
- After multiple nights of few or no calls, retained firefighters worry that their pager are broken and report disrupted sleep because of the expectation of a call.
- Cortisol is a marker of one of the bodies two main stress systems.

WHAT WE WANT TO KNOW
- Is there an effect of working on-call from home on cortisol the day after a night on call (with and without calls)?
- Is there an anticipatory effect of working on-call from home?

HOW WE DID IT
- Fire and emergency service workers filled out a daily sleep and work diary, wore an activity monitor and collected seven saliva samples a day (0, 0.5, 1, 3, 6, 9, and 12h post awakening) for one week.

THE DAY AFTER A NIGHT CALL FINDINGS
- CAR peak was 7 ± 3 nmol.l⁻¹ blunted on mornings after a night call than when off-call (p < 0.05), see Figure 1.
- CAR AUCg, was 5 ± 2 units lesson mornings after a night call when off-call (p < 0.05), see Figure 2.
- There was no effect on next day CAR reactivity, CAR AUCi, mean 12h salivary cortisol, diurnal cortisol slope or daily cortisol AUCg.

ANTICIPATIONS FINDINGS
- There was no anticipatory effect on mean daily cortisol levels, diurnal cortisol slope, daily cortisol AUCg or the 12h cortisol sample.

WHAT DOES THIS MEAN?
- Some aspects of the cortisol profile are affected by receiving a night callout, but not by being on-call without a night call.
- There does not appear to be an anticipatory effect of working on-call from home on cortisol.

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