


Posttraumatic Stress Disorder And Sleep Quality Among Urban Firefighters In Thailand – [Letter]

This article was published in the following Dove Press journal:
Nature and Science of Sleep

Eleanor Smith
Diana Velazquez-Pimentel 
Amaury Trockels

Barts and the London School of Medicine
and Dentistry, London, UK

Dear editor

With great interest we read the study by Khumtong et al on posttraumatic stress disorder (PTSD) and sleep quality amongst a population of urban firefighters in Thailand.¹ The authors concluded urban firefighters in Thailand with PTSD were more likely to experience poor sleep quality than those without. Therefore, they importantly recognise that interventions in psychological well-being for this population should be implemented. We would like to offer some insights into their study.

Khumtong et al used the Posttraumatic Stress Disorder Checklist – Civilian Version (PCL-C) in order to identify PTSD within their study population.¹ The authors chose a cut-off score of 44. However, there is no universal validated threshold score to make a diagnosis with the PCL-C, as cut-offs vary between 27 and 59.² Nydegger et al suggested using a score of 50 or more to indicate PTSD in a firefighting population.³ Therefore, it is likely that Khumtong et al are overestimating the presence of PTSD within their sample, decreasing the validity of their results. Furthermore, these results cannot be compared to other studies using the PCL-C if their values for PTSD are different.

A further limitation of the study is the chosen method to collect data on the population's quality of sleep, using the Pittsburgh Sleep Quality Index (PSQI) questionnaire. This questionnaire focusses on the sleep quality of the individual over the past month.¹ As the firefighters were on duty for 24 hrs on '3–4 days per week',¹ it's likely that work-related sleep disturbance was inevitable. This was a confounding factor which was not taken into account. We suggest that future questionnaires distinguish between sleep whilst working versus when not working, in order to see how PTSD can affect sleep in all areas of the firefighters' lives.

The study looked into only male firefighters, with women being excluded from the study. Evidence shows that PTSD is twice as prevalent in women as in men.² Although the exact mechanisms behind the development of PTSD are unknown, animal studies have shown there to be gender-specific neurochemical changes following exposure to trauma.⁴ This unfortunately limits the conclusions of this study to a male-only population. Future studies should include women, regardless of the sample size, as current data is lacking.

Overall, the study by Khumtong et al importantly highlighted the need for psychological help to be available for urban firefighters in Thailand. One such inexpensive and easily accessible method which could be useful is mindfulness. Studies have found this to be a protective factor to prevent the development of PTSD, within urban firefighters in the US.⁵

Correspondence: Eleanor Smith
Barts and the London School of Medicine
and Dentistry, 4 Newark St, Whitechapel,
London E1 2AT, UK
Email e.smith@smd14.qmul.ac.uk

Disclosure

All authors contributed equally to the production of this letter. The authors report not conflicts of interest in this communication.

References

1. Khumtong C, Taneepanichskul N. Posttraumatic stress disorder and sleep quality among urban firefighters in Thailand. *Nat Sci Sleep*. [online]. 2019;11(1179–1608):123–130. doi:10.2147/NSS.S207764
2. Bressler R, Erford B, Dean S. A systematic review of the posttraumatic stress disorder checklist (PCL). *J Couns Dev*. 2018;96(2):167–186. doi:10.1002/jcad.12190
3. Nydegger R, Nydegger L, Basile F. Post-traumatic stress disorder and coping among career professional firefighters. *Am J Health Sci*. 2011;2(1):11–20. doi:10.19030/ajhs.v2i1.4365
4. Pooley A, Benjamin R, Sreedhar S, et al. Sex differences in the traumatic stress response: PTSD symptoms in women recapitulated in female rats. *Biol Sex Differ*. 2018;9(1):31. doi:10.1186/s13293-018-0191-9
5. Smith B, Ortiz J, Steffen L, et al. Mindfulness is associated with fewer PTSD symptoms, depressive symptoms, physical symptoms, and alcohol problems in urban firefighters. *J Consult Clin Psychol*. 2011;79(5):613–617. doi:10.1037/a0025189

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Nature and Science of Sleep 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Nature and Science of Sleep editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Nature and Science of Sleep

Dovepress

Publish your work in this journal

Nature and Science of Sleep is an international, peer-reviewed, open access journal covering all aspects of sleep science and sleep medicine, including the neurophysiology and functions of sleep, the genetics of sleep, sleep and society, biological rhythms, dreaming, sleep disorders and therapy, and strategies to optimize healthy sleep.

The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/nature-and-science-of-sleep-journal>