Sleep deprivation and medical errors: What is the consequence on performance?

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Sleep deprivation appears to be one of the major causes of medical errors for healthcare professionals working on long or night shifts. Previous research from the same author indicates major consequences of prolonged sleep deprivation (PSD) on concentration and fine regulation of clinical skills in healthcare professionals. PSD is different from insomnia due to stress from work; instead, it is mostly linked to the way in which shifts occur in the healthcare, including night shifts, locum jobs, etc. The current research explored ways to find if the general performance on specific cognitive skills was different for two groups of healthcare professionals experiencing or not PSD. Therefore, the pilot sample comprised two groups: healthcare professionals working on night and long shifts, like nurses and physicians (n=47), and allied healthcare professionals (n=32) not working on night shifts or not involved in shifts at high risk for PSD. In a pilot study, the healthcare professionals interviewed reported on a dichotomous scale if errors have (‘1’) or have not (‘0’) occurred as a consequence of PSD classified as lack of proper sleep, interrupted sleep, or chronic lack of adequate sleep. A logistic regression analysis evaluated the data. The results show that 74% (n=35) of healthcare professionals and 6% (n=2) of allied professionals committed medical errors (Chi-square=40.84; df=1; p=<.0001) as a consequence of PSD. Major errors committed were omissions, misidentifications, generalizations, impaired fine muscular skills, and reduced critical thinking. Lack of proper concentration was described as the major cause of the medical errors.

Biography

Carlo Lazzari has completed his MD at the age of 24 years from the University of Rome, his Master from Drexel University, USA, his PhD from University of Bologna, Italy. He is the director of the Centre for Healthcare and Medical Education in Essex, United Kingdom, a research organization focused on healthcare training. He has published more than 100 papers in reputed journals and has been serving as an editorial board member of repute.

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