Poster Presentation

Importance of Adequate Sleep Time in Safe Driving

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Published: 18 February, 2015

Abstract

Sleep deprivation (SD) increases the risk of human-error related accidents and a major cause of motor vehicle accidents. The overall prevalence of insufficient sleep in adults has been estimated at 20%. According to a comprehensive study prevalence of daytime sleepiness, among young adults (age 21 to 30 years), the average nocturnal sleep time during weekdays was 6.7 hours and on weekends was 7.4 hours. Studies in young adults indicate that 8 to 9 hours of extended nocturnal sleep are needed to resolve sleepiness caused by decreased sleep time. Driving is a complex task, which can be broken down into specific cognitive processes. Sleep-deprived driving is the operation of a motor vehicle while being cognitively impaired by a lack of sleep. Results of a 1998 survey showed, 23% of adults have fallen asleep while driving. There is not accurate statistical document of sleep deprivation related events in Iran. Total SD impairs attention and working memory, but it also affects other functions, such as long-term memory and decision-making. Partial SD is found to influence attention, especially vigilance. Thus, by attention to frequent incidence of sleep deprivation and extensive effects of SD on cognitive functions during driving, modification of sleep time in order to prevention of insufficient time, could be valuable way to increase safe driving and prevent motor vehicle accidents.

Keywords: Road Safety, Sleep, Traffic.

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