

## Commentary

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# Sleep quality and psychological well-being of university students

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The duration and time of sleep affect the general health and well-being of individuals [1]. It has been recommended that adults, aged 18 – 64 years, should sleep for 7 to 9 hours per night [2], however, many people struggle with sleep problems of various kinds and hardly meet these recommendations. Sleep is necessary for cognition, alertness, vigilance, and sustenance of attention as well as control of emotions [3]. The effects of sleep deprivation on cognitive performance and other psychological variables have been widely studied [1]. Sleepiness, the short-term effect of inadequate sleep, may lead to irritability, reduced alertness, poor motor skills, and attention problems. Among the long-term effects are obesity, type 2 diabetes, hypertension, and mental health disorders [2,3]. Sleep deprivation in adults of all ages is defined as getting less than 7 hours of sleep per night [3]

Sleep and circadian disturbances are involved in the development of depressive and anxiety symptoms. There is an established link between short sleep, which leads to daytime sleepiness, and an increased risk of depression and anxiety [4]. Studies have shown that sleep duration is associated with an increased risk of depression and anxiety, however, the differences in individual sleep need and lifestyle may influence the risk differently. Sleep duration is known to be impacted by the diurnal preference for sleep and activities, which is known as a chronotype. Evening chronotypes are found to have more depressive and anxiety

symptoms than morning types [5]. Poor sleep habits are endemic on college and university campuses. Barahona-Correa et al. (2018) demonstrated the need to pay attention to the effect of daytime sleepiness on the mental health and well-being of university students [6,7]. Their findings confirmed several reports on the effect of sleep debt, sleep deprivation and daytime sleepiness on the mental health status of these students [6,7,8]. In a study where sleepiness and sleep debt as parallel mediators were tested, it was found that they mediated the relationship between short sleep, and depression and anxiety risk among university students [6].

The demanding nature of university courses makes sleep deprivation a common occurrence among students particularly, medical students, due to the high academic demands of their courses [7]. It has been reported that the use of technology, caffeine and alcohol among students contributes to poor sleep habits. Other factors include late-night or all-night studying, drug abuse, social obligations, work etc. [7]. Most students often extend their study periods into the night to improve their academic performance, which ironically leads to a further reduction in sleep hours causing daytime sleepiness [2], and increased depression, anxiety, stress, and mental distress [1]. Daytime sleepiness has been shown to alter neurochemicals like serotonin and norepinephrine, these accentuate negative emotions and increase psychopathological risk [8]. Various studies have found that about 70% of university students sleep less than 8 hours per night while about 50% of them suffer from daytime sleepiness [6]. Poor sleep patterns have been

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associated with high failure rates and poor academic performance. Lamentably, most students are ignorant of the high cost of sleep deprivation. There is therefore a need to create awareness among students, uncovering the dangers of sleep deprivation and promoting the need for good sleep to enhance academic performance and improve their mental health status.

The article, “Daytime sleepiness reflects depression, anxiety, and stress among students at the University of Ghana Medical School” published in this present issue, reveals the level of sleep deprivation among University of Ghana Medical School students, highlighting the relationship between sleep deprivation and depression, anxiety, and stress [9]. This is a step in the right direction, however, further research in this area is warranted to achieve the desired optimum mental health status among students. The need for healthy or good-quality sleep cannot be overemphasised. It requires adequate sleeping duration, appropriate sleep time, regularity of sleep and freedom from sleep disturbances.

## REFERENCES

- Pilcher JJ & Walters AS (1997) How Sleep Deprivation Affects Psychological Variables Related to College Students' Cognitive Performance. *J Am Coll Health* 46(3):121-126. <https://doi.org/10.1080/07448489709595597>
- Watson NF, Badr MS, Belenky G, Bliwise DL, Buxton OM, Buysse D, Dinges DF, Gangwisch J, Grandner MA, Kushida C, Malhotra RK, Martin JL, Patel SR, Quan SF, Tasali E (2015) Joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society on the recommended amount of sleep for a healthy adult: methodology and discussion. *J Sleep and Sleep Disord Res* 38(8):1161–1183. <https://doi.org/10.5665/sleep.4886>
- Watson NF, Badr MS, Belenky G, Bliwise DL, Buxton OM, Buysse D, Dinges DF, Gangwisch J, Grandner MA, Kushida C, Malhotra RK, Martin JL, Patel SR, Quan SF, Tasali E (2015) Recommended amount of sleep for a healthy adult: a joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society. *J Clin Sleep Med* 11(6):591-592. <https://doi.org/10.5664/jcsm.4758>
- Peters BR, Joireman J, Ridgeway RL (2005) Individual differences in the consideration of future consequences scale correlate with sleep habits, sleep quality, and GPA in university students. *Psychol Rep* 96:817-824. <https://doi.org/10.2466/pr0.96.3.817-824>
- Roeppke SE, Duffy JF (2010) Differential impact of chronotype on weekday and weekend sleep timing and duration. *Nat Sci Sleep* 2:213–220. <https://doi.org/10.2147/NSS.S12572>
- Worley SL (2018) The extraordinary importance of sleep: the detrimental effects of inadequate sleep on health and public safety drive an explosion of sleep research. *Pharm Ther* 43(12):758-763
- Barahona-Correa JE, Aristizabal-Mayor JD, Lasalvia P, Ruiz AJ, Hidalgo-Martínez P (2018) Sleep disturbances, academic performance, depressive symptoms and substance use among medical students in Bogota, Colombia. *Sleep Sci* 11:260–268. <https://doi.org/10.5935/1984-0063.20180041>
- Randler C, Fabl C, Kalb N (2017) From Lark to Owl: Developmental changes in morningness-eveningness from new-borns to early adulthood. *Sci Rep* 7:45874. <https://doi.org/10.1038/srep45874>
- Taylor A, Ed-Bansah D, Tagoe TA (2023). Daytime sleepiness reflects depression, anxiety, and stress among students at the University of Ghana Medical School. *HSI Journal* 4(1):473-480. <https://doi.org/10.46829/hsijournal.2023.6.4.1.473-480>

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