

Sleep Deprivation among Adolescents during Pandemic

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Abstract: Sleep deprivation, also known as sleep insufficiency or sleeplessness, is the condition of not having adequate duration and/or quality of sleep to support decent alertness, performance, and health. It can be either chronic or acute and may vary widely in severity. The most common effect of sleep deprivation is drowsiness, tiredness, mood swings, irritability and reduced alertness. Sleep hygiene, counselling, lifestyle and environmental adjustments, medications, and alternative therapies are some of the treatment used to treat sleep deprivation. And some more reasons including changes in sleep pattern and habitual changes can also cause a sleep problems in everyone at once in a life time particularly this situation was faced everyone in the world during the pandemic called Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Where people had more leisure time and also under gone through sleep problems particularly adolescents. Hence this study examines about the sleep deprivation among the adolescents. During pandemic.300 Samples were taken for this study from both Male and female aged between 16 to 21. Two scales were used for this study sleep deprivation and quality of life and t - test were also used in this study.

Keywords: Sleep deprivation, Corona virus, Quality of life and Adolescents

1. Introduction

According to a National Sleep Foundation Study, drowsiness or fatigue is the principle cause of at least 100, 000 traffic accidents each year. One North Carolina state study found that 55% of all “fall - asleep” crashes were caused by drivers under the age of 25. Parents shouldn't let sleep deprived adolescents get behind the wheel anymore than they would if their kid had been drinking. But while it might pose the most serious risk, driving is not the only danger. After getting between 3 and 4 hours of sleep for several nights in a row, while working on a term paper in his sophomore year of high school, Gabriel Levine went into his kitchen at 3am to get a snack. Instead of slicing through a wedge of cheese he sliced through his thumb clear to the bone, severing a ligament. “It ended up requiring a trip to the emergency room and two surgeries to repair it, and I spent 6 weeks in a cast, ” says Levine, now 19 and a freshman in college. Though he says the injury was “absolutely the result of how little sleep I'd been getting by on for months, ” he didn't get any extensions on homework or papers. And because he could only type with one hand, he ended up having to stay up even later to finish his work.

Inability to Self - Regulate

Along with a lack of sleep goes the ability to exercise self - control — over one's emotions, impulses and mood. Dr. Ryan C. Meldrum assistant professor in the Department of Criminal Justice at Florida International University, found a link between short sleep duration, late bedtimes, and poor overall sleep quality and aggression, impulsivity, and being short - tempered.

Sleep and Mood

Many of the teens interviewed for this story cited mood as the first thing affected by sleep deprivation. Some kids can suffer and push through, or have the ability to subsist on very little sleep for long periods and then binge - sleep

enough to recharge, so they can get through the next sleep - deprived week. But other kids are not so resilient.

Teens tend to stay up late and want to sleep late in the morning. But it's not that they are being lazy or stubborn. It's actually due to natural rhythms of the teen's body. Body chemicals in teens work to make the teen naturally want to go to bed around midnight or later. These chemicals also make teens want to wake up in the late morning. Early upschool start times work against these natural body rhythms. And pressures on a teen's time after school stop them from going to bed early to make up for lost sleep. The result is often a sleep - deprived teen.

2. Review of Literature

Pascoe 2020 mentioned in his Sleep disturbances are a common complaint among college students worldwide, likely as a result of stress due to increased academic demands. Moreover, busy schedules, new social opportunities, and a sudden change in sleeping environment can be additional contributing factors

Haile et al., 2017 Both the American Medical Association and American Academy of Sleep Medicine consider insufficient sleep to pose a serious risk to adolescents and young adults American Medical Association, American Academy of Sleep Medicine, 2010; National Sleep Foundation, 2006 with sleep deprivation also having a significant impact on the health, wellbeing, and academic performance of this particular group

Gaultne 2017 studies have aimed to estimate the prevalence of sleep disorders among college students. In particular, insomnia, restless leg syndrome (RLS), circadian rhythm disorders (CRDs), affective disorders, narcolepsy, and obstructive sleep apnoea (OSA) are frequently reported in college students

Piro et al., 2018 Previous studies have found the prevalence of insomnia to be approximately 69% among college students Abdalqader et al., 2018; Sing & Wong, 2010). Other disorders, like CRDs (19.6%), affective disorders (14.5%), nightmares (6.6%), sleepwalking (5.7%), and narcolepsy (1.3%), are less frequently identified.

Objectives

The current study aims to study the relationship between sleep deprivation and the psychological distress and quality of life among Adolescents during pandemic

Hypothesis

- There is a significant relationship between quality of life and sleep deprivation among Adolescents
- There is no significant relationship between quality of life and sleep deprivation among Adolescents
- There is a significant difference between quality of life and sleep deprivation among Adolescents
- There is no significant difference between quality of life and sleep deprivation among Adolescents

Study Participants and Tools Used

The current study has been headed with 300 participants from the colleges in and around Salem district of Tamil Nadu. The data's were self reported by the samples aged between 16 - 22 years old Adolescents

- Sleep quality scale developed by Chol Shin was used it consists of 30 items and it's a four point likert scale
- Quality of life questionnaire has been used.

3. Procedure

Descriptive statistics was used to analyze the data's, t - test, Mean, Standard deviation and Pearson correlation were utilized in order to find the significant difference in SPSS version 25. The current study has the following variables:

- Dependent Variable: sleep deprivation
- Independent Variable: Quality of life with respect to Gender, Age and Educational background.

4. Results and Discussion

Table 1: Shows the mean, SD, T value and p value of Qol and sleep deprivation with regard to gender, age and Educational background

	Frequency	Percent	T value	P value
Male	97	32.7	32.7	32.7
Female	200	67.3	67.3	100.0

4.1 Discussion

From the above table it's inferred that female participants have got 67.3 percentage it shows that female students have higher level of sleep deprivation during this pandemic due to high usage of gadgets and when compared to female, male students have lower level of sleep deprivation.

5. Conclusion

After this pandemic people have changed all their daily habits and like the same way sleeping patterns and the

biological rhythm have been changed so it from this study it shows that female have higher level of sleep deprivation when compared to male and female showed lesser level of quality of life when compared to male

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