

## The Prevalence of Sleeping Disorders in Medical Students at Taibah University



### Medical Science

KEYWORDS :

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### ABSTRACT

*Sleep is an essential life process. Lack of sleep reduces our alertness, impairs our judgment, and affects our moods. Disruptions in sleep can be caused by a variety of issues, from teeth grinding (bruxism) to night terrors. When a person suffers from difficulty in sleeping with no obvious cause, it is referred to as insomnia. Our study aim to identify the prevalence of sleeping disorders among medical students at taibah university. Methods: The study is a descriptive cross sectional study. The study include the following: male – medical students – 1st, 2nd & 3rd year. We used questionnaire to collect data and then analyzed the data of questionnaire to diagnose presence of sleeping disorders and the symptom of sleeping disorder. Results: This paper has reviewed evidence on the prevalence of sleeping disorders. The study population were 150 medical students and when we are looking to those with sleeping disorders where it was found that the lowest percentage represented by 17 students (1st and 2nd, 3rd year) out of 126 who showed normal state and out of 17 who showed symptoms of sleeping disorder. Discussion: In comparison with other study by (Jane F. Gaultney) regarding the prevalence of sleeping disorder among college students in America Their study prevalence were higher than our study prevalence. Probably due to the fact that there study wasn't conducted on medical students. Not to forget the study population variations among the 2 studies and this could be due to the fact that in America alcohol and drugs are consumed which might have a major role in affecting the sleeping habits in Americans*

### Introduction

Sleep is an essential life process. Lack of sleep reduces our alertness, impairs our judgment, and affects our moods. Impairments to alertness and judgment due to sleep deprivation not only lead to a loss of productivity at school or work, but also contribute to increased accident rates (1). Disruptions in sleep can be caused by a variety of issues, from teeth grinding (bruxism) to night terrors. When a person suffers from difficulty in sleeping with no obvious cause, it is referred to as insomnia. In addition, sleep disorders may also cause sufferers to sleep excessively, a condition known as hypersomnia. Management of sleep disturbances that are secondary to mental, medical, or substance abuse disorders should focus on the underlying conditions (2).

There are many factors that cause sleep problems, some are related to the medical and psychiatric conditions of the patients such as asthma, depression, anxiety or stress. Other factors may be due to genetics, age, or life style of the patients especially if they work at night which interfere with the nature of the biologic clock (3).

A study in 2010 through 1,845 college students at a large, south-eastern public university revealed that twenty-seven percent of students were at risk for at least one sleep disorder. African American and Asian students reported less risk for insomnia and fewer poor sleep practices relative to white and Latino students. Students reported insufficient sleep and a discrepancy between weekday and weekend amount of sleep. Students at risk for sleep disorders were overrepresented among students in academic jeopardy (GPA < 2.0)(4). Another study in Saudi Arabia among medical students with 491 responses with a response rate of 55%. The Epworth Sleepiness Scale (ESS) score demonstrated that 36.6% of participants were considered to have abnormal sleep habits, with a statistically significant increase in female students ( $p=0.000$ ). Sleeping between 6–10h per day was associated with normal ESS scores ( $p=0.019$ ) as well as the academic grades  $\geq 3.75$ . Abnormal ESS scores were associated with lower academic achievement ( $p=0.002$ )(5). Another study among 400 Palestinian students with a mean age of  $20.2 \pm 1.3$  were studied. Reported mean duration of night sleep in the study sample was  $6.4 \pm 1.1$  hours. The majority (58.3%) of students went to bed before midnight and 18% of the total sample woke up before 6 am. Sleep latency of more than one hour was present in 19.3% of





books and quizzes and finals as there normal daily routine day will change completely. we found in our study that Students in the second year also suffer from S.D (3 out of 50 are most likely to have the disease, while 41 students aren't symptomatic to the disease and 6 students suffer from symptoms of sleeping disorder) . we also found that in 1st year medical students 5 out 50 suffer from S.D and 4 students have its symptoms. We explained that because 2nd year student are still on their basic study and can catch up with their study and get its use in practical use. While in 1st year students they its because they still on the beginning of the tract and so far it's easy for them to get information that will help in the future.

In comparison with other study by (Jane F. Gaultney) (10) regarding the prevalence of sleeping disorder among college students in America. Over 500 students out of 1,845 (27%) were reported to have symptoms of sleeping disorder . There was no reason to assume

that this sample was at any greater risk than similar ones, although this possibility cannot be ruled out . it was found that Adequate, uninterrupted sleep may optimize learning and cognitive functioning. Sleep appears to play an important, although not well-understood, role in memory consolidation . Sleep after study promotes integration of newly acquired material with existing memories. Untreated sleep disorders, therefore, may hamper a student's ability to learn new material

well. Their prevalence of sleeping disorder was 27% while the prevalence in our study is (10.7% in 3rd year medical students, 6% in 2nd year medical students, 6% in 1st year medical students) the total percent in preclinical medical students in taibah university suffering from sleep disorder was 22.7% ,which relatively close to the study made in America with slight difference. The prevalence of their study was higher than our study. This could be due to the fact that in America alcohol and drugs are consumed which might have a major role in affecting the sleeping habits in Americans .and the fact that the study wasn't conducted on medical students only ,also the population variation should be considered (1845 students in their study, 150 students in our study) Our study was limited to preclinical medical students (1st, 2nd, 3rd) it didn't include all students and it was cross sectional study because it's easier ,cheaper and easy to assess and analyze. In our study There weren't any special considerations to special individual circumstances among students. Also, many confounding factors are thought to play a major role in exaggeration of symptoms from exams and these factors were completely ignored.

To other investigators who are willing in doing same study we recommend taking as much as possible from medical student (basic and clinical as well), also compare the prevalence of sleeping disorder with other colleges and scientific institutions as college of Engineering, science, and business. In order to have more accurate measures on sleeping disorder disease .

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