



SLEEP QUALITY AND PERCEPTION OF THE EFFECT OF SLEEP ON HEALTH IN UNDERGRADUATES

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ABSTRACT

Sleep quality has consistently been found deteriorating due to lifestyle changes, stress, environmental disturbances and modern technologies. This is very important in regard to students whose academic performance can also be affected. The present study was undertaken to assess the sleep quality in dental undergraduates at a dental institute in Faridkot. 44 students participated in the study. Due consent was obtained after detailed information to the students. Students were given a questionnaire to fill containing questions about any daytime symptoms of lack of sleep, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction. It was found most of the students answered positive to questions regarding good sleep quality. However, the difference between the number of positive and negative responses was very less. Sleep perception of students regarding good sleep habits was also tested. They were aware of good sleep habits. They were divided on the effect of social life on good sleep. This type of study helps to create awareness among the students about the required quality of sleep and good sleep habits.

KEY WORDS: sleep quality, sleep perception, good sleep habits, academic performance.

INTRODUCTION

Insufficient sleep or lack of good quality of sleep has unfavorable effects on both students' health and on their academic performance. However sleep quality has consistently been found deteriorating due to lifestyle changes, stress, environmental disturbances and modern technologies.^[1] Nutrition, lack of exercise, social lives, and technology are also factors that can decrease the quality of college students' sleep. Lack of sleep can lead to social strain, emotional instability, and health problems, which can affect students in many negative ways.^[2]

Chol Shin et al. have developed Sleep Quality Scale consisting of 28 items. The SQS evaluates six domains of sleep quality: daytime symptoms, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction. Developers hoped to create a scale that could be used as an all inclusive assessment tool – a general, efficient measure suitable for evaluating sleep quality in a variety of patient and research populations.^[3]

It is noted fact that sleep helps to repair and improve functionality in all the cells. Also it plays important role in consolidation of memory and strengthening of motivation. Motivation for learning is a complex overarching concept, which is influenced by a range of psychosocial factors both internal to the learner and

present in the learner's social and natural environment.^[4] Therefore, we can reasonably conclude that sleep and its proper quantity and quality can be linked to both the learning ability and the desire to learn in the students. In professional courses, motivation to learn is even more important as the college student is exposed to self dependence and a broader curriculum than present at school. The Hawthorne Studies and other studies above would suggest that the more perceived choice, and the more interest/enjoyment students have in their studies, the more they feel able to express themselves in the academic environment, and the more involved they believe themselves to be in their education, the more motivated they ought to be, and the better their academic performance ought to be.

MATERIAL AND METHODS

The present work was carried out at Dasmesh Institute of Research and Dental Sciences, Faridkot, Punjab among the 1st year BDS students. The study was conducted on 45 undergraduate students who are 18 years and above who were selected as sample of study. The students are legally and ethically capable of participating in the study. The sample number was obtained after including students in favor of participating in the study and obtaining due consent.

Students were given a questionnaire to fill containing questions about any daytime symptoms of lack of sleep,

restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction. Answers were recorded on four ranked Likert scale as very, sometime, often and rarely. In addition, questions related to perception of sleep requirement and its effect on health were also included. Scores were assigned for each answer and due analysis of the results was done. Subjective self reported questionnaires are the best option to assess the sleep quality as sleep is a subjective phenomenon and perception of quality and satisfaction varies from individual to individual.

RESEARCH OBJECTIVES

The main objective of the study is

1. To assess the quality of sleep in undergraduates and whether it is affected by the technological and other stresses of day to day life
2. To estimate the perception of importance of sleep and its effects in health in them.

RESULTS

Overall, 44 responses were recorded. The age and sex of the students was recorded. As for age, 6 students (13.6%) were 18 years old, 19 students (43.2%) were 19 years old, 11 students (25%) were 20 years old while 5 students (11.4%) were 21 years old, one student was 22 years old(2.3%) and 2 students were 25 years old(4.5%)

Age

44 responses

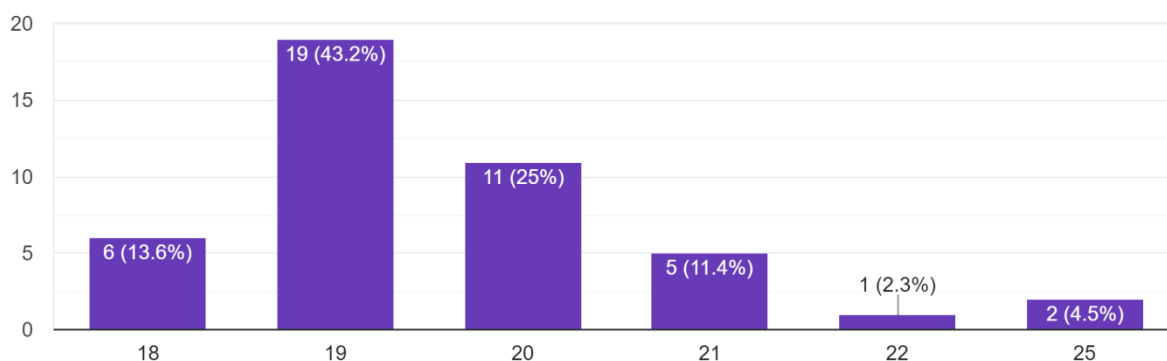


Figure 1 shows age distribution of students.

Male: female ratio among the students is depicted as follows:
 Female students were 79.5% while male students were 20.5%.

Sex

44 responses

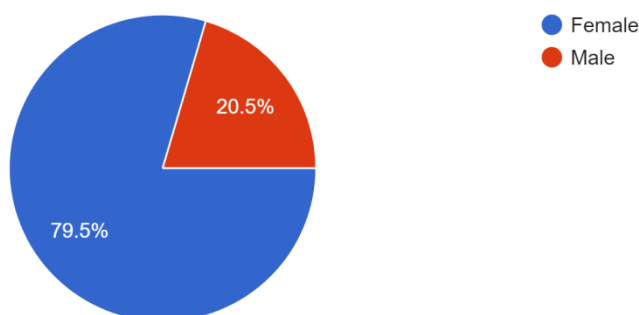


Figure 2. shows male female ratio of students.

Body mass index of the students was also tabulated.

Body Mass Index (BMI)(calculated as weight in kilograms divided by height in meters squared)

44 responses

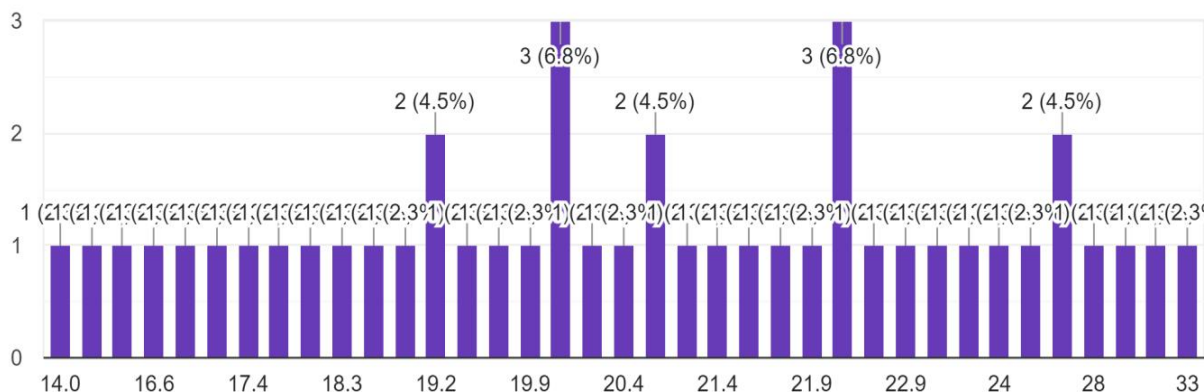


Figure 3. depicts the frequency distribution.

Standard deviation was found to be, s: 3.9671704839909

Count, N: 44

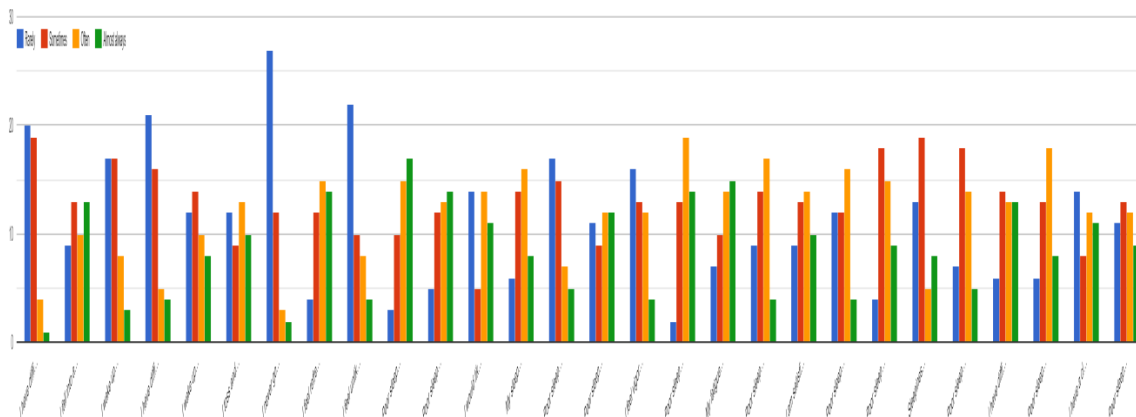
Sum, Σx: 935.02

Mean, \bar{x} : 21.250454545455

Variance, s²: 15.738441649049

Concerning the sleep quality questionnaire, to the question if they had difficulty falling asleep, 20 and 19 students said respectively answered rarely and sometimes while 4 and 1 answered often and always respectively. Similarly, 9 and 13 students answered rarely and sometimes to the question whether they fell into deep sleep while 10 and 13 answered often and almost always. To whether they woke up while sleeping,

34 students answered rarely and sometimes, while 11 students answered often and almost always. 21 students replied negatively to toss and turn while 23 students replied positive. To whether they feel refreshed, 16 students answered negatively and 29 answered positive. Keeping in view these and other answers, the sleep quality of the students was judged as adequate. Figure 3. shows the individual responses to each question.

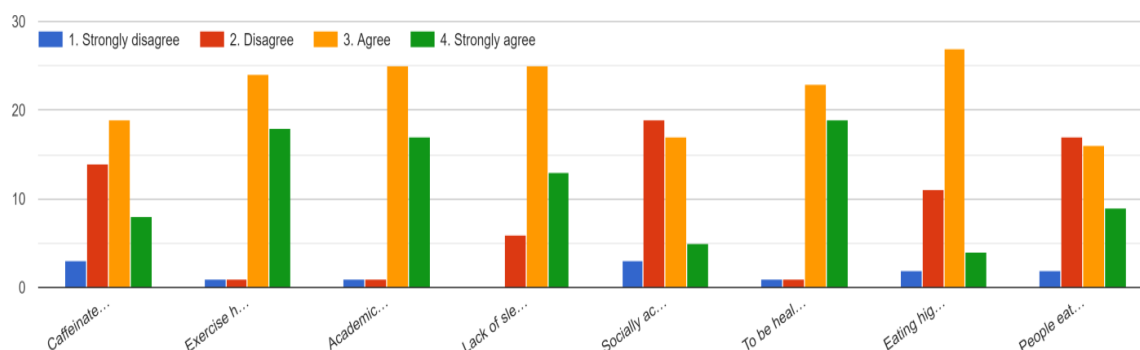


The preponderance of blue and red shows positive responses to sleep quality, while orange and green show

negative sleep quality. Over all, students had good quality, but the difference was very less.

Next the sleep perception was recorded, to make students more aware of good sleep habits. To the question, caffeinated drinks keep people awake at night, 3 and 14 strongly disagreed and disagreed respectively, while 19 and 8 agreed and strongly agreed respectively. Similarly, to exercise helps to sleep better, only 2 disagreed while

42 agreed. Interestingly, when it was asked socially active people do not get enough sleep, 50% agreed and 50% disagreed. On the whole, the students shows good grasp of good sleeping habits. Figure 5. shows the answers tabulated for the sleep perception questions.



DISCUSSION

It was surprising to discover that most of the students had good quality of sleep. But the negative numbers were also not inconsiderable. Thus, it is imperative to do this type of studies to make students more aware of their sleep quality. Due to changes in lifestyle, more nighttime events and activities and in general, the tendency of students of this age to sleep late, the quality of sleep is deteriorating and they must be vigilant about getting enough sleep. The use of cell phones and excessive screen time also contributes to lack of good sleep. It was observed that the student group was having good perception of sleep habits. They were divided on their opinion of social life affecting sleep. Students should be made aware of good sleeping habits as this affects their academics as well as physical and mental health.

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