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**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3564700>Available online at: <http://www.iajps.com>**Research Article****DIFFERENT SLEEP PATTERNS AMONG MEDICAL
STUDENTS**¹Muhammad Raheel, ²Areeha Zulfiqar, ³Hafiz Wasif Ahmad¹Bahawal Victoria Hospital Bahawalpur²Pakistan Institute of Medical Sciences Islamabad³Bahwal Victoria Hospital Bahawalpur**Abstract:**

Objective: To determine the sleep patterns among medical students. **Material and Methods:** This study was conducted in different medical colleges. A total of 100 male and female students from different classes was included in this study. A predefined questionnaire was served. The data was collected and analyzed using SPSS Ver. 23.0. **Results:** The mean age of the students was 22.99 ± 3.23 years. There were thirty five male and sixty five female students. Sixty eight students (68%) responded that they don't get enough sleep during their academic year. **Conclusion:** Most of the medical students have irregular sleep patterns and they don't sleep well. It is associated with their academic assignments, examinations, irregular hospital routines, electricity issues and tiredness after the commute.

Keywords: Medical education, sleep, insomnia.

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INTRODUCTION:

According to studies, around one-third of young adults suffer from insomnia (sleep disturbances) globally. Around 32.6% of the patients reported in healthcare facilities with the complaint of sleep disturbance and its associated symptoms¹⁻³. Patients who suffer from insomnia for a longer period of time may develop certain complications such as musculoskeletal disorders, anger, mental health, irritability, hypertension, and certain cerebrovascular symptoms^{4,5}.

Medical students have to go through a lot of academic pressures throughout their career. A lot of assignments, practicals, ward-rotations and hospital duties make them tired early. The situation is aggravated if they don't get enough time for sleep hence leading to a disturbed life balance, poor quality of life. According to some studies, medical students have a poor sleep quality that is way different from health standards and that experienced by modern society⁶.

The sleep quality impacts a lot on the life of a medical student. In this case, they might not concentrate on their studies and assignments, might not attend their ward rotations properly and might not perform their hospital duties in an efficient way. This will ultimately impact their professional growth, decision power, and emotional intelligence.

The purpose of this study to determine the sleep behaviors among medical students. This study will help us in finding the root causes of disturbed sleep among them and will enable us to formulate certain guidelines in order to ensure proper and quality sleep among them.

MATERIAL AND METHODS:

This study was conducted in different medical colleges. A total of 100 male and female students from different classes was included in this study. The purpose of the study was explained to them and consent was taken. Confidentiality of each student was ensured. A predefined questionnaire was served. The data was collected and analyzed using SPSS Ver. 23.0. The categorical variables were presented as frequencies and percentages, quantitative variables were however presented as mean and standard deviation.

RESULTS:

The mean age of the students was 22.99 ± 3.23 years. The minimum age noticed was 21 years and maximum age noticed was 25 years. There were thirty five male

and sixty five female students. There were thirty one students (31%) from final year, nineteen (19%) from the fourth year, fourteen (14%) from the third year, sixteen (16%) from the second year and 20 (20%) students from the first year. Regarding the sleep patterns, sixty eight students (68%) responded that they don't get enough sleep during their academic year. Thirty-two students (32%) told they get proper sleep despite their hectic routines. Certain factors related to poor quality of sleep were assignments (41%), electricity issues (19%), irregular ward rotations (20%) and hospital duties (15%) and daily commute (15%) in case of day scholars.

DISCUSSION:

In our study, 68% of the students responded that they don't get enough sleep during their academic routines. Out of them, 41% of students related this with their routine assignments and examinations. In a review by Curcio *et al.* it was suggested that the quality and quantity of sleep are closely related to academic performance and learning in students⁷.

A regular sleep improves the cognitive competencies of students and helps in their memory consolidation as well as getting strong nerves enabling them to handle tough situations. In a study at King Saud University Saudi Arabia, it was seen that those students who performed excellently during their examinations reported that they sleep earlier in the night and have higher sleep duration throughout the week. This study also suggested that students who have decreased sleep in the night, who sleep late and who sleep during the daytime performed average in the examinations. Similar kind of study was also conducted on Brazilian students as well. This study also suggested similar findings i.e. students with proper sleep patterns performed well in their examinations and daily routines^{8,9}.

There are some limitations to this study i.e. we included a smaller number of students and secondly who didn't compare their academic performance with their sleep patterns. A study including these factors should be conducted.

CONCLUSION:

Most of the medical students have irregular sleep patterns and they don't sleep well. It is associated with their academic assignments, examinations, irregular hospital routines, electricity issues and tiredness after the commute.

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