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### A STUDY TO ASSESS THE PREVALENCE OF INSOMNIA AMONG ACADEMICIANS

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#### **ABSTRACT**

Insomnia is a condition that is not merely an issue of poor sleep but is significantly linked to various psychiatric disorders, including depression, anxiety, and other mood disturbances. The high-stress environment of university life, characterized by academic pressures, social challenges, and lifestyle changes, contributes to the widespread occurrence of insomnia among academicians. Insomnia, characterized by difficulty falling asleep, staying asleep, or experiencing non-restorative sleep, is a prevalent sleep disorder affecting individuals across various demographics. This study aims to contribute to the existing body of knowledge by investigating the prevalence of insomnia among academicians at Parul University, Vadodara, Gujarat, and examining the relationship between insomnia and relevant socio-demographic factors. This study aims to identify the prevalence of insomnia among academicians, correlate socio-demographics and insomnia, and determine the severity among academicians. A Quantitative study was conducted among 190 academicians in Parul University were selected for the study. A structured knowledge questionnaire was used to assess the prevalence of insomnia among academicians. In summary, research methodology is essential for defining the scope and nature of research activities, ensuring the rigor and credibility of study outcomes, and providing a structured framework for conducting empiricalninvestigations. Its careful application is vital for producing meaningful and valuable contributions to knowledge in various fields of study. The mean insomnia severity index scores of academicians, it depicts that, insomnia severity index scale mean was 15.77, median was 15; mode was 15 with standard deviation 5.34 and range score of 4-25. The study indicates a relatively high prevalence of insomnia among academicians. Factors such as department, age, work duration, physical activity, diet, and sleep habits are associated with insomnia severity. Conclusion: The study did not consider other potential factors influencing insomnia, such as stress, workload, and sleep hygiene. Conduct further research to explore the underlying mechanisms of insomnia among academicians. Develop and evaluate interventions targeting identified risk factors. Promote sleep hygiene and stress management strategies among academicians

Keywords: Prevalence, Insomnia, ISI (Insomnia Severity Index), Academicians.



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### **INTRODUCTION**

Insomnia is a pervasive health concern affecting university academicians on a global scale. This condition is not merely an issue of poor sleep but is significantly linked to various psychiatric disorders, including depression, anxiety, and other mood disturbances<sup>1</sup>. Research has been conducted across both developed and developing countries to understand the prevalence and impact of insomnia in young people<sup>2</sup>. South Asia, with its unique cultural, socio-economic, and educational contexts, may present distinct patterns and factors contributing to insomnia among university students<sup>3</sup>.

Sleep is a fundamental human necessity for maintaining good health, as it facilitates physical restoration and shields the body from the natural wear and tear of waking hours. During sleep, brain wave patterns change, allowing the body to relax deeply.<sup>4</sup> Sleep is an active process, characterized by its functional, reversible, and cyclical nature, involving behaviors such as relative immobility and heightened thresholds for responding to external stimuli. It brings about significant biological and mental changes, including deep muscle relaxation, eye movements, variations in breathing rate, hormonal adjustments, and changes in heart rate.<sup>5</sup> Despite its importance, sleep problems, especially among the youth, are common due to various internal and external factors.<sup>6</sup>

To diagnose insomnia, these symptoms must occur at least three nights per week and persist for at least one month. This leads to daytime drowsiness, poor concentration, irritability, and a lack of feeling refreshed upon waking. The National Institutes of Health Sleep Disorders Research Plan (NIHSDRP) describes chronic or severe sleep disorders as difficulties in initiating or maintaining sleep, or complaints about sleep quality, that occur daily and result in poor interpersonal relationships and weakened memory. 8

Medical students, in particular, experience higher levels of psychological distress compared to the general population, as shown by a systematic review of 40 studies from Canada and the United States. <sup>9</sup>This distress is linked to sleep problems and high levels of emotional exhaustion, which can exacerbate other health issues. The relationship between sleep problems and emotional exhaustion is reciprocal, with higher levels of one intensifying the other <sup>10</sup>. Sleep disorders, particularly insomnia, can have profound effects on overall health and daily functioning <sup>11</sup>.

#### **OBJECTIVES OF THE STUDY**

- To identify the prevalence of insomnia severity among academicians.
- To correlate the socio demographic and insomnia.
- To find out severity of insomnia among academicians.

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**HYPOTHESIS** 

H0: There will be no significant association between the insomnia of academicians with

selected socio-demographic variable.

H1: There will be a significant association between the insomnia of the academicians

with selected socio demographic variable.

MATERIALS AND METHODOLOGY

• The quantitative research approach utilized in this study contribute to the existing body of knowledge by

investigating the prevalence of insomnia among academicians at Parul University, Vadodara, Gujarat,

and examining the relationship between insomnia and relevant socio- demographic factors.

• A Non-experimental descriptive survey designs is use in this study and tools are Demographic tool and

Insomnia Severity Scale.

• It explains the theoretical framework or perspective guiding the study, such as whether it adopts a

quantitative, qualitative, or mixed-methods approach.

• This section outlines the overall structure and plan of the study, including whether it is experimental,

observational, cross-sectional, longitudinal, or another type of design chosen to investigate insomnia

prevalence.

• Describes the specific location or environment where the study took place, which could be a particular

institution, city, region, or online platform.

• Details how participants were chosen to represent the target population of academicians experiencing

insomnia, including the criteria used for inclusion and exclusion. It also discusses the sampling

technique employed, whether it was random, stratified, convenience sampling, etc

• Explains the process of designing or selecting tools and instruments used to gather data on insomnia

prevalence, such as questionnaires, interviews, or physiological measures.

**RESEARCH DESIGN:** Non-Experimental Survey Design

**INCLUSION CRITERIA:** Academicians who are not willing to participate in this study.

**EXCLUSION CRITERIA:** Academicians who are willing to participate in this study.

**SAMPLE SIZE:** 190

**SAMPLING TECHNIQUE:** By using Non Probablity Convenient Sampling Technique will be used in

this study.

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#### RESULT

Out of a total of 190 academicians participants the majority of participants were female, comprising 102(53.7%) of the total 190 participants, while males accounted for only 72 (37.9%).

Insomnia Severity Index Scale						
Mean	Median	Mode	Sd	Range		
15.77	15.00	15	5.346	4-25		

Tab 1: Findings of insomnia severity index scale

### SOCIO DEMOGRAPHIC VARIABLES

The present study consisted of 190 participants. The selected personal variables are described under sub headings of the designation, department, age groups, gender, residential status, qualification, duration of work, physical activity, drinking habits, type of meal, taking heavy meal in night time, sleeping hours, employment status, alcohol, sleeping medication, using of smart phones before two hours of sleeping.

Level of Insomnia Severity					
No	Sub	Moderate	Severe		
clinically	Threshold	Insomnia	Insomnia		
Significant	Insomnia				
Insomnia					
f (%)	f (%)	f (%)	f (%)		
12(6.4%)	64(29.9%)	82(36.8%)	32(16.8%)		

Tab 2: Frequency and percentage of distribution of participants according to their level of insomnia severity

There was significant association between the level of insomnia and their demographic variable of qualification, duration of work, physical activity, regular drinking substance, taking meal per day, taking heavy meal at night time, sleeping hours, age and department. There was a significant association between the level of insomnia and the other demographic variables among academicians.

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### **DISCUSSION AND CONCLUSION**

The findings of the study were based on Objectives and are discussed under the following headings:

• The first objective was to identify the prevalence of insomnia among academicians.

Total scores of the insomnia severity index scale of elderly people were tabulated and descriptive statistics was calculated. The data presented in Table 4.2 reveals the mean insomnia severity index scores of academicians, it depicts that, insomnia severity index scale mean was 15.77, median was 15; mode was 15 with standard deviation 5.34 and range score of 4-25.

• The second objective was to identify the prevalence of insomnia severity among academicians.

The table 4.3 shows the mean insomnia severity index scores of academicians, it depicts that 12(6.4%) no clinically significant insomnia, 64(29.9%) sub threshold insomnia, 82(36.8%) moderate insomnia, 32(16.8%) had severe insomnia.

• The third objective was to correlating the socio-demographic and insomnia.

There was a significant association between the level of insomnia and their demographic variable of qualification, duration of work, physical activity, regular drinking substance, taking meals per day, taking heavy meals at night time, sleeping hours, age, and department. There was a significant association between the level of insomnia and the other demographic variables among academicians. Hence research hypothesis H2 is partially accepted.

Total scores of the Insomnia Severity Index Scale of elderly people were tabulated and descriptive statistics was calculated. The data presented in Table 1 reveals the mean insomnia severity index scores of academicians, it depicts that, insomnia severity index scale mean was 15.77, median was 15; mode was 15 with standard deviation 5.34 and range score of 4-25. The table 2 shows the mean insomnia severity index scores of academicians, it depicts that 12(6.4%) no clinically significant insomnia, 64(29.9%) sub threshold insomnia, 82(36.8%) moderate insomnia, 32(16.8%) had severe insomnia.

A similar study was conducted by **A.M. Angelone, A. Mattei et al.** Prevalence and correlates for self-reported sleep problems among nursing students. The aim of this paper is to conduct a survey based on a questionnaire that would characterize night time and daytime habits in nursing students to estimate the prevalence of chronic insomnia, sleep disturbance and their correlates. The cross-sectional survey on university students reports significantly worse sleep quality than the general population. A total of 364 nursing students. who had accepted to participate in the study were randomly selected. The overall prevalence of insomnia was 26,7%. It increased significantly from 10,3% for students aged < 20 years to 45,5% for those aged > 40 years. The prevalence of sleep problems were 9,4% for disorders of initiating sleep, 8,3% for disrupted sleep, 7,7% for early morning awakening and subjectively poor quality of



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sleep 22,3%. Multiple logistic regression analysis showed that greater age was significantly associated with an increased risk of insomnia. Other risk predictors of insomnia were headache, severe depression and self perception of poor quality of life. Daytime sleepiness and morning tiredness were significantly associated with current smoking habit and painful physical condition. The risk of unsatisfactory academic progress increased significantly in students reported poor sleep quality.

**ETHICAL PERMISSION:** Permission taken from Parul University Institutional Ethical Committee for human research (PU – IECHER)

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