

## ORIGINAL RESEARCH

66. **Cross Sectional Study On Prevalence Of Insomnia And Factors Contributing To Insomnia In Adolescent School Students**Athul A.,<sup>1</sup> Athira K Raveendran,<sup>1</sup> Athira Mangalan,<sup>1</sup> Athira Manoj,<sup>1</sup> Athira Sudhakaran.<sup>1</sup><sup>1</sup>MBBS Graduate, KUHS/GMC/TVPM/ India

**Background:** Insomnia- the unwelcome experience of difficulty in falling asleep, difficulty in maintaining sleep or early morning awakening with inability to resume sleep is common in all age groups and impairs quality of life. Untreated insomnia has severe impact on health and socioeconomy. These include subjective and objective daytime consequences like fatigue or malaise, poor attention and concentration, social and vocational dysfunction, mood disturbances, daytime sleepiness, reduced energy, tension etc. Insomnia is highly related to advancing age, family history of insomnia, female sex, lifestyle, emotional background, worry and stress; each of which is important to assess among the community, especially centering the adolescent age group. Since there are no known existing studies on the same topic in the authors setting and the available studies show wide variations in the prevalence of insomnia, they would like to investigate that.

**Objective:** Primary objective: To study the prevalence of Insomnia in adolescent school children in Thiruvananthapuram Corporation, Kerala, India. Secondary objective: To find out the factors contributing to insomnia among the study population-

**Methodology:** Study design: Cross sectional study. Study setting: Higher secondary schools of Thiruvananthapuram Corporation, Kerala, India. Study population: Adolescent students of two schools of Thiruvananthapuram Corporation. Data collection and analysis: Schools were approached through proper channels. Permissions were taken from school authorities before study. Questionnaires based on Insomnia Severity Index were distributed among the study population. The questionnaire consists of two sections, one based on a standard Insomnia severity assessment question and second one includes questions that are directed towards the establishment of relation between insomnia and certain factors, in which the researchers are interested in. A score based on all of this is determined and the demographic data is analyzed using spss software. The Chi square test is used to describe the relations.

**Results:** 165 candidates took part in the study. On analysis 94 students had no clinically significant insomnia, 51 students had subthreshold insomnia, 20 students had clinical insomnia of moderate severity, and no students had severe clinical insomnia. On analysis, there was significant association between gender of students and insomnia. It was found to be more associated with females compared to males. From the study they also reached the conclusion that the following factors contribute to insomnia among adolescent school children: problems in family, academic stress (mainly, pressure from parents) and substance use (alcohol, cigarettes, drugs). Smart phone use showed no significance whereas occurrence of insomnia increased with increasing average screen time per day.

**Conclusion:** Sleep symptoms often go under reported and under diagnosed and can have a significant impact on long term outcome. In some cases they are environmental or related to lifestyle factors. Therefore it is important to identify these factors. Early detection of insomnia and its symptoms is also an important step to avoid

secondary psychiatric disorders. This study provides preliminary data on sleep quality and factors contributing to insomnia, which maybe used to guide sleep hygiene promotion and intervention among adolescent school students.

**Table1.** Association Between Exposure Variables and Insomnia Severity Levels.

| Exposure variable                        | No clinically significant insomnia (%) | Subthreshold insomnia (%) | Clinical insomnia of moderate severity (%) | Chi square    | P value      |
|--|--|---------------------------|--|---------------|--------------|
| <b>Gender</b>                            |  |                           |  | <b>12.922</b> | <b>0.001</b> |
| - Male                                   | 68                                     | 24.7                      | 7.2  |               |              |
| - Female                                 | 41.2                                   | 39.7                      | 19.1                                       |               |              |
| <b>Problems in family</b>                |  |                           |  | <b>23.950</b> | <b>0.000</b> |
| - Yes                                    | 8.7                                    | 21.6                      | 55   |               |              |
| - No                                     | 91.3                                   | 78.4                      | 45   |               |              |
| <b>Average screen time per day (hrs)</b> |  |                           |  | <b>44.152</b> | <b>0.000</b> |
| - ≤ 5                                    | 92.3                                   | 82.3                      | 75   |               |              |
| - > 5 – ≤ 12                             | 7.7                                    | 17.7                      | 25   |               |              |
| <b>Academic stress</b>                   |  |                           |  | <b>33.763</b> | <b>0.000</b> |
| - Yes                                    | 47.9                                   | 88.2                      | 95   |               |              |
| - No                                     | 52.1                                   | 11.8                      | 5  |               |              |
| <b>Substance use</b>                     |  |                           |  | <b>13.685</b> | <b>0.005</b> |
| - Yes                                    | 28.6                                   | 14.3                      | 57.1                                       |               |              |
| - No                                     | 58.2                                   | 31.6                      | 10.1                                       |               |              |

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