



THE 4TH MULAWARMAN INTERNATIONAL  
CONFERENCE ON TROPICAL PUBLIC HEALTH  
(MICTOPH) 2025



---

## ABSTRACT

**Title of Abstract** : ASSESING RISK OF INSOMNIA IN YOUTH: MENTAL HEALTH AND MODIFIABLE LIFESTYLE FACTORS  
**Authors of Abstract** : Asti Alya Rahmahdia 1, Abdullah Ghanynafi 2, Erni Astutik 3  
**Affiliation** : Others  
**Correspondence E-mail** : asti.alya.rahmahdia-2024@fkm.unair.ac.id

**Background** : Insomnia is a pervasive global public health concern with significant implications for productivity and overall well-being, particularly among youth.

**Objective** : This study aimed to assess the association between mental health factors (depression, anxiety, and stress) and selected modifiable lifestyle factors (physical activity and coffee consumption) with the incidence of insomnia in an urban Indonesian setting.

**Research Methods/ Implementation Methods** : A cross-sectional study was conducted on a sample of 111 youth in East Java, Indonesia. Data were collected using the Depression, Anxiety, and Stress Scale-21 (DASS-21) and the Insomnia Severity Index (ISI). Bivariate analysis using the Chi-Square test was performed.

**Results** : The prevalence of insomnia in this study was 41.4% while depression, anxiety, and stress were reported at 12.6%, 23.4%, and 0.9% respectively. Anxiety was significantly associated with the incidence of insomnia. Youth classified with anxiety were associated with a twofold increase in the risk of insomnia (PR=1.916; 95%CI=1.276-2.879; p=0.009) compared to those without anxiety. No statistically significant association was observed between stress(p=0.414), depression (p=0.324), physical activity level (p=0.697), and coffee consumption status (p=0.389) with insomnia.

**Conclusion/Lesson Learned** : The study concludes that in this population, anxiety is the most critical and isolated mental health determinant of insomnia, while behavioral factors such as physical activity and coffee consumption did not emerge as significant risk factors. These findings emphasize the necessity for targeted public health strategies focusing on anxiety screening and early management to alleviate the burden of insomnia among youth in similar urban settings.

**Keyword** : Insomnia; Mental health; Youth well-being; Lifestyle factors.