

ABSTRACT

CORRELATION BETWEEN CIRCADIAN RHYTHMICITY AND STRESS
PREDISPOSITION OF MEDICAL STUDENTS CLASS OF 2016 IN FACULTY OF
MEDICINE AIRLANGGA UNIVERSITY

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Circadian rhythm is known to have very important role in living things from eubacteria to human being. This rhythm is ruled by a specific and complex system which is encoded in our gene. Circadian rhythm is affected by external stimuli, but if these stimuli is eliminated, the system can still maintain it's 24 hours cycle. Circadian rhythm is also plays a significant role in keeping the homeostasis, hormone secretion, sleep-arousal cycle, performance even memory. This rhythm can be disturbed by some factor, like stress and depression.

This is an observational analytic research, which designed to know about the correlation between circadian rhythmicity and stress predisposition of medical student class of 2016 in faculty of medicine Airlangga University. The subject is selected using certain criteria. The circadian rhythm is measured by time of sleep, and stress by Holmes and Rahe Stress Scale for Non-Adults (Youth).

Result of the research, correlation between circadian rhythmicity and stress predisposition (stress score) which is measured by daily sleep time is not significantly correlated ($p=0.646$), sleep time before exam ($p=0.203$) and sleep-wake time interval ($p=0.672$). The result considered significant if the value of $p=0.05$. the result may be due to the homogeneity of the sleep time, the age of the subject which is relatively young therefore have a good system to maintain their cycle rhythmicity. Besides, the subject has low stress score value (mean =125,02) which is considered a low risk to developing a certain disorder.

Keywords: Circadian Rhythmicity, Stress Tendency, Sleep time.