

Original Paper

Effect of physical activity on quality of sleep in female students

Azarniveh MS (M.Sc)¹, Tavakoli Khormizi SA (M.Sc)*¹

¹Academic Instructor, Department of Physical Training, Faculty of Human Sciences, University of Zabol, Zabol, Iran.

Abstract

Background and Objective: Sleep is an important component of the circadian cycle is associated with the restoration of the physical and mental faculties. Physical activity is one of the confounding factors in improving sleep quality. This study was done to determine the effect of physical activity on quality of sleep in female students.

Methods: This cross-sectional study was conducted on 370 female students in Zabol University in south-east of Iran. Demographic data through a questionnaire were collected for each subject. Sleep quality and physical activity of subjects were recorded using standardized questionnaire Pittsburgh sleep quality index (PSQI) and physical activity Beck test. Subjects according to physical activity divided into active and inactive groups.

Results: Poor sleep quality was seen in 25.2% and 67.4% of active and inactive students, respectively. Mean of Sleep quality in both groups active 5.73 ± 3.22 and inactive 7.21 ± 3.75 was inappropriate but sleep quality in active females was higher than inactive females ($P < 0.05$). A favorable condition for the quality of sleep was seen in 65.7% of the active group with BMI < 25 and only 9.1% of students BMI was more than 25. In inactive students, 60.8% of subjects with BMI < 25 had poor sleep quality. Both levels of BMI, sleep quality was significantly different between the groups, but this difference was higher in the active group ($P < 0.05$).

Conclusion: Poor sleep quality was seen in high percentage of female students and physical activity influences the quality of sleep.

Keywords: Quality of sleep, Physical activity, Body mass index, Female student

* Corresponding Author: Tavakoli Khormizi SA (M.Sc), E-mail: tavakoliali26@uoz.ac.ir

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