DOI: 10.7860/JCDR/2025/80478.21768

Correlation of Earpods Usage and Sleep Quality among Young Adults: A Correlation Study

S Jeyanthi, Professor, Department of Physiotherapy, Sri Venkateswaraa College of Physiotherapy; Associate Dean- Research, Sri Venkateswaraa Medical College Hospital and Research Centre, Pondicherry University, Puducherry, India.
V Lakshmipriya, Postgraduate Student, Department of Physiotherapy, Sri Venkateswaraa College of Physiotherapy, Pondicherry University, Puducherry, India.
S Suhara, Postgraduate Student, Department of Physiotherapy, Sri Venkateswaraa College of Physiotherapy, Pondicherry University, Puducherry, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
V Lakshmipriya,
Postgraduate Student, Department of Physiotherapy, Sri Venkateswaraa College of Physiotherapy, Pondicherry University, Puducherry, India.
E-mail: priyalaksh66@gmail.com

ABSTRACT

Introduction: The prevalence of using earpods among young adults is high, ranging from 38% to 62%.Vestibular centre in the brain process and regulate the body sleep wake cycle. Noise electromagnetic radiations produced by ear pods has the potential to damage the vestibular nuclei of the brain over time. Any dysfunction in the vestibular part led to loss of balance, sleep quality, insomnia and daytime fatigue.

Aim: The aim of the study was to correlate the earpods hourly & yearly usage and quality of sleep among young adults.

Materials and Methods: This study was correlation study with convenient sampling, 194 young adults who are using ear pods were selected. Ear pods usage pattern for individual was assessed through structured questionnaire. Sleep quality was measured by using Pittsburgh sleep questionnaire. Institutional Ethics committee approval was taken.

Results: Pearson correlation was performed to analyse correlation between sleep quality and hourly & yearly usage of earpods.The results obtained revealed that 47% had poor sleep quality. Among the partcipants, more than 65% had subjective sleep quality affected, 44% had major sleep disturbance due to overthinking, stress and work/social/exam related anxiety. The 31% of participants had longer sleep latency and 33% had daytime dysfunction including sleepiness. Interestingly, the sleep duration of 85% are not affected, they slept for at least 7 hours. The hourly usage of earpods, years of usage of earpods and quality of sleep were negatively correlated with r=0.83; 0.88.

Conclusion: The ear pods usage per day and the years of usage had a negative impact on sleep quality.

Keywords: Pittsburgh sleep questionnaire, Sleep duration, Vestibular nuclei