

chiatría Danubina, 34(1), 25-33. <https://doi.org/10.24869/psyd.2022.25>

Villar-Alises, O., Martínez-Miranda, P., & Martínez-Calderon, J. (2023). Prenatal yoga-based interventions may improve

mental health during pregnancy: An overview of systematic reviews with meta-analysis. *International Journal of Environmental Research and Public Health*, 20(2), 1556. <https://doi.org/10.3390/ijerph20021556>

Correspondence:

Smita Elizabeth Joseph

Physiotherapy Department, Saveetha College of

Physiotherapy, Saveetha Institute of Medical

And Technical Sciences, Chennai, India.

smitajoseph77@gmail.com

* * * * *

Efficacy of transcutaneous auricular vagal nerve stimulation on sleep quality in construction workers with insomnia

Vijayaragavan Vaiyapuri¹, Anitha A² & Surya Vishnuram³

¹ Post graduate, Saveetha College of Physiotherapy, SIMATS, Chennai, Tamil Nadu, India.

² Associate professor, Saveetha College of Physiotherapy, SIMATS, Chennai, Tamil Nadu, India

³ Tutor, Saveetha College of Physiotherapy, SIMATS, Chennai, Tamil Nadu, India.

received: 5. 9. 2024;

revised: 7. 9. 2024;

accepted: 13. 9. 2024

* * * * *

Dear Editor,

We would like to share our experience with the *Psychiatria Danubina* audience regarding Stressors related to work force and employees face increasing workloads, and most workers will have anxiety, depression, lack of sleep, and other mental illness (Dai et al., 2022). Insomnia is a common sleep problem that affects everyday activity. It may lead to the development of many comorbidities, such as significant depression or arterial hypertension (Galuszko-Wegielnik et al., 2012).

Because of the prevalence of sleep disorders, specific diagnostic surveys and clinical diagnosis models have already been established. Today, there are easily accessible and applicable surveys Epworth Sleepiness Scale, STOP-Bang, Insomnia Severity Index, and Pittsburgh Sleep Quality Index that could be highly useful in clinical practice for this exact purpose (Darko et al., 2022). Sleep disorders are mental and physical problems that cause a variety of negative outcomes as a result of insufficient sleep or poor sleep quality (Han et al., 2016). Studies show non-invasive transcutaneous vagal nerve stimulation (TaVNS) has a vital role in controlling sleep (Wu et al., 2022).

Our research included ten subjects, both male and female, age between 35-40, who were recently diagnosed with Insomnia (sleep disturbance) based on their Pittsburgh Sleep Quality Index scores of more than 8 score are included. At present, VNS is recognized as an effective supplementary therapy for conditions like epilepsy, depression, and insomnia. Patients who receive VNS have reported enhancements in sleep quality, improved overall well-being, reduced daytime fatigue, and elevated mood. Interestingly, these improvements occurred separately from VNS's anti-epileptic and anti-depressive effects, suggesting its potential role in sleep regulation (Wu et al., 2022).

The purpose of this study was to examine the effect of Transcutaneous Auricular Vagal Nerve Stimulation on sleep quality in Construction Workers with Insomnia. The study was approved by the institutional ethics committee on human subject (01/054/2023/ISRB/PGSR/SCPT) and followed the Helsinki Declaration guidelines. For the selected participants, pre-test values were obtained using the Pittsburgh Sleep Quality Index. The transcutaneous auricular vagal nerve stimulation, the subjects were treated with the parameter settings of 20Hz pulse frequency, pulse width of 0.2ms, current of 1mA and

stimulation intensity adjusted according to the maximum intensity that patient would tolerate, conducted over 12 weeks (30 minutes per day 4 days per week). Post-test values were obtained using Pittsburgh Sleep Quality Index after the completion of the intervention.

During our training sessions with patients suffering from sleep problem, we observed significant improvements in their treatment outcomes. Participants were fully informed about the study and provided written consent before the commencement of the study. Initial assessments were conducted using the Pittsburgh Sleep Quality Index as pre-tests. After 12 weeks of treatment, post-test measurements using the same assessment were taken. Statistical analysis indicated a significant result with a p-value of < 0.05, demonstrating that the Transcutaneous auricular vagal nerve stimulation therapy positively impacted to sleep quality among the construction workers. This study is expected to contribute significantly to the literature on Insomnia, offering insights that could enhance treatment strategies for healthcare professionals working with construction workers experiencing better sleep quality.

Correspondence:

Mr. Vijayaragavan Vaiyapuri;
Saveetha College of Physiotherapy, SIMATS,
Chennai, Tamil Nadu, India.
vijaykanchi2000@gmail.com

References

- Dai, H., & Wang, J. (2022, May 16). Research on the effectiveness and efficiency of employees' psychological anxiety in modern engineering construction project management mode. *Psychiatria Danubina*, 34(Suppl 2), 359.
- Gałuszek-Węgielnik, M., Jakuszkowiak-Wojten, K., Wigłusz, M. S., Cubała, W. J., & Landowski, J. (2012, July 1). The efficacy of cognitive-behavioural therapy (CBT) as related to sleep quality and hyperarousal level in the treatment of primary insomnia. *Psychiatria Danubina*, 24(Suppl 1), 51–55.
- Han, Y., Yuan, Y., Zhang, L., & Fu, Y. (2016, June 7). Sleep disorder status of nurses in general hospitals and its influencing factors. *Psychiatria Danubina*, 28(2), 176–183.
- Marcinko, D. (2022). Utility of screening questionnaires to detect obstructive sleep apnea in patients with obesity. *Psychiatria Danubina*, 34(10), 72–78.
- Wu, Y., Song, L., Wang, X., Li, N., Zhan, S., Rong, P., Wang, Y., & Liu, A. (2022, October). Transcutaneous vagus nerve stimulation could improve the effective rate on the quality of sleep in the treatment of primary insomnia: A randomized control trial. *Brain Sciences*, 12(10), Article 1296. <https://doi.org/10.3390/brainsci12101296>

* * * * *

Prevalence of phantom vibration syndrome during COVID-19 pandemic among collegiate – An observational study

Jegadevasyan R, Suresh J & Abishek J R

SRM College of physiotherapy, faculty of medicine and Health sciences, SRM institute of science and Technology, Kattankulathur, Chengalpattu, India

received: 03. 02. 2025;

revised: 11. 03.2025;

accepted: 12. 03. 2025

* * * * *

Dear Editor,

We are pleased to submit our manuscript titled “Prevalence of Phantom Vibration Syndrome During COVID-19 Pandemic Among Collegiate – An Observational Study” for consideration in *Psychiatria Danubina*. This study aims to evaluate the prevalence and impact of Phantom Vibration Syndrome (PVS) among college students during the COVID-19 pandemic.

Everyday life now revolves around mobile phone usage, and studies have linked excessive screen exposure to various psychological effects. One of these is PVS, a tactile hallucination that people report, which can happen because of neural plasticity, misinterpreting sensory information, or dopamine dysregulation. It is associated with occupational burnout, sleep disturbances, cognitive impairments, and fatigue (Rosenberger, 2015). Our study assessed 500 students