



The Effectiveness of Sleep Behavioral Interventions during the Third Trimester of Pregnancy on Sleep Quality and Postpartum Depression: A Randomized Controlled Trial

Somayeh Ghafarpour^{1*}, Kamran Yazdan Bakhsh², Mohammad Reza Zarbakhsh³,
Simin Hosseinian⁴, Samira Ghafarpour⁵

^{1,2,3,4,5}Islamic Azad University Tonekabon Branch, Iran

Abstract

Unsatisfactory sleep quality is one of the most common complications of pregnancy, which can predispose mothers to postpartum depression, requiring implementing effective psychological interventions to prevent and modify behaviors accentuating sleep problems. This study was a randomized clinical controlled trial with a pre-test/post-test design aiming to investigate the effectiveness of sleep behavioral interventions during the third trimester of pregnancy on sleep quality and postpartum depression. A total of 50 pregnant mothers in the 26-30 weeks of pregnancy suffering from sleep problems (based on the score obtained from the Pittsburgh Sleep Questionnaire) were randomized into two groups (control and intervention, n= 25 per group). The data were collected using interviews, the Pittsburgh Sleep Quality Index (PSQI), and the Edinburgh Postnatal Depression Scale (EPDS) were used. The participants in the intervention group received eight 60-minute sessions of combinational training for behavioral therapy techniques. At the end of the intervention and four weeks after delivery, sleep quality and postpartum depression were evaluated. Considering that the Kolmogorov Smirnov test confirmed the normal distribution of the data, the independent t-test and analysis of covariance were used to analyze the data, showing that the behavioral interventions were effective on the overall sleep quality after delivery ($p=0.001$); however, no statistically significant effects were observed on postpartum depression, the sub-scales of sleep disorders, and daily functioning ($p>0.05$). Considering the potential effectiveness of behavioral interventions in improving sleep quality and alleviating insomnia symptoms, it is recommended to implement such measures as an effective intervention to prevent or treat these problems during prenatal and postnatal periods.

Keywords: Behavioral interventions, Sleep quality, Postpartum depression, Pregnancy, Delivery