

KEY POINT SUMMARY

OBJECTIVES

In this randomized controlled trial researchers evaluated a modified sleep hygiene intervention for new parents (infant proximity, noise masking, and dim lighting) to try to improve their sleep. Can Modifications to the Bedroom Environment Improve the Sleep of New Parents? Two Randomized Controlled Trials

Lee, K. A., Gay, C. L. 2011 | Research in Nursing & Health Volume 34, Issue 1, Pages 7-19

Key Concepts/Context

One of the major challenges of new parenthood is adjusting to the sleep disruption that comes with caring for a newborn. Parents-to-be know that caring for an infant with random sleep and feeding patterns will mean sleep deprivation and fatigue, but few are prepared for the actual physical and emotional demands.

Methods

Two samples of new mothers (n = 118 and 122) were randomized to the experimental intervention or attention control. Researchers assessed sleep in late pregnancy and first 3 months postpartum using actigraphy and the General Sleep Disturbance Scale (GSDS). The first trial (Sample 1) was conducted with a sample of first-time parents (mothers and their partners) who were predominantly educated, employed, and economically advantaged. To determine whether the intervention was effective for less advantaged women, the study was repeated in a second sample of first-time mothers who generally had less education, lower employment rates, and lower incomes (Sample 2).

Participants in both samples were assessed four times in their homes or another location of their choice.

To facilitate interpretation of actigraphy data, participants also used 48-hour sleep logs to record their bed times, wake times, and times when the actigraph was removed.





The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research providing the value of design in improving patient and performance outcomes in healthcare facility planning, design, and construction, optimizing the healthcare experience and contributing to superior patient, staff, and performance outcomes.

Learn more at www.healthdesign.org

Findings

The sleep hygiene strategies did not benefit the women or their partners in Sample 1 (more socioeconomically advantaged), but did improve postpartum sleep among Sample 2 women (less advantaged). Simple bedroom environment changes can improve sleep for new mothers with few resources.

Limitations

The study could not tease out the benefits of the individual components because they were administered as a package. For example, keeping the infant close by without a countermeasure, like white noise, to mask the baby's noisy sleep could unnecessarily awaken a highly vigilant new mother. Further, with any behavioral intervention, it is possible that the participants will use the intervention components spontaneously or customize them. Therefore, it is essential to assess intervention use in both control and intervention groups. One of the challenges of this study was that the intervention components were widely available and seemed to be gaining in popularity, thereby making it difficult to find an adequate control group of parents not using some or all three components of the sleep hygiene intervention.

Design Implications

The study results suggest that simple bedroom modifications based on sleep hygiene principles have different beneficial outcomes depending on the family's socioeconomic resources. Some parents reported that the bedside bassinet was the perfect solution; others reported that their sleep and well-being improved immensely once they began bed-sharing or once their infant was moved to a separate room. There was similar diversity in the responses to the white noise machine and the dim lighting.

Reviewer note: This study has application not only in the home environment, but potentially in all healthcare facilities that promote family-centered care.

