Children's Hospital of Philadelphia
PolicyLab

Beds for Kids: Enhancing Pediatric Sleep Among Low-income Youth

Statement of Problem

Sleep is one of the most fundamental aspects of child development. Insufficient sleep duration and poor sleep quality impact one-third of preschoolers and more than half of school-aged children. These sleep deficiencies are associated with a number of adverse developmental outcomes, including diminished neurocognitive, behavioral and physical health functioning, and increased family stress. Studies show that there are persistent sleep health disparities across the lifespan. For instance, compared to children living in higher socioeconomic status (SES) homes or neighborhoods, those living in lower-SES contexts may be exposed to increased environmental sleep disruptions, such as noise, light and household overcrowding. Additionally, living without an individual bed or other designated sleep space can make it challenging for youth to obtain healthy sleep.

Over the last 5 years, we have partnered with the **Beds for Kids Program** to conduct several studies evaluating the benefits of child bed provision and family sleep education on pediatric sleep health. Beds for Kids is a Philadelphia-area program that is part of the larger volunteer organization, One House at a Time, that provides beds, bedding, and a sleep education brochure to children living without an individual bed (e.g., sleeping on the floor, on a sofa, or crowded into one bed with family members) and in a household whose income is at or below 100 percent of the United Stated poverty threshold. The program accepts referrals from area social service agencies, as well as from Children's Hospital of Philadelphia (CHOP) primary care sites in the greater Philadelphia area.

Description

Our initial study with Beds for Kids evaluated whether receiving a bed plus caregiver-based sleep education (3 messages: an early bedtime; no caffeine; no bedroom electronics) was associated with improvements in child sleep health. We found that in 152 children ages 2 to 12 years, those who received a bed plus sleep health education showed increased caregiver-reported nighttime sleep duration and reduced electronics in their bedrooms compared to children who received a bed plus a control educational condition (dental hygiene). With funding from CHOP, we then examined the impact of Beds for Kids' participation on the sleep and mood of preschoolers and their primary caregivers and are now analyzing study results.

The goal of our current study, funded by the American Academy of Sleep Medicine Foundation, is to determine whether bed provision combined with community provider-delivered sleep health education through Beds for Kids can improve sleep in school-aged children referred to the Beds for Kids program. For this study, we are recruiting up to 100 caregiver-child pairs with a child aged 8-12 years. Half of the families receive standard care from the Beds for Kids program (bed, bedding, sleep education handout), and half of families will receive the Enhanced Beds for Kids program (bed, bedding, sleep education handout + personalized sleep health education sessions). Beds for Kids staff are delivering the personalized sleep health education through two telephone sessions. To assess child sleep outcomes, caregivers and children are completing ratings of child sleep duration and quality at baseline, 2-weeks post intervention, and 6-week follow-up. While a primary aim of this study is to identify whether additional, personalized sleep health education can enhance child sleep

outcomes, we are also evaluating whether the personalized sleep health education is feasible to implement and acceptable to Beds for Kids staff and families. This research has the potential to make a significant, positive impact on pediatric sleep health disparities, and to inform the large-scale dissemination of community provider-implemented sleep health education.

Next Steps

By analyzing the impact of Beds for Kids and its sleep education components, we hope to offer deeper insight into how the presence of a bed and family sleep education can impact nightly child sleep, daily child behavior and caregiver mood, opening the door for future outreach programs.

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Related Tools & Publications

Cumulative Socio-demographic Risk Factors and Sleep Outcomes in Early Childhood
Article
Sep 2019

Early Childhood Sleep Intervention in Urban Primary Care: Caregiver and Clinician Perspectives
Article
May 2020

Identifying Modifiable Factors Linking Parenting and Sleep in Racial/Ethnic Minority Children
Article
May 2020

Sleep Well!: A Pilot Study of an Education Campaign to Improve Sleep of Socioeconomically Disadvantaged Children.
Article
Dec 2016

Socioeconomic Disadvantage and Sleep in Early Childhood: Real-world Data from a Mobile Health Application
Article
Mar 2021