

## ABSTRACT: 2015 ELAM Institutional Action Project Poster Symposium

**Project Title:** Implementing Parent-Based Sleep Education in Community Practice Settings

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**Mentors and Collaborators:** Dr. Margaret Rush (mentor); Drs. Whitney Loring, Amy Vehec, Marcy Webb, Terry Katz, and Lily Wang (collaborators)

**Background:** Sleep difficulties in children are common and are a major source of stress to families, affecting child behavior and family functioning. While many factors contribute to sleep difficulties in children, behavioral approaches are often effective in improving sleep. However, given limited access to care in academic medical centers, most families do not receive the education they need to help their children sleep. Bringing sleep education into community settings presents an opportunity to respond to this challenge.

**Purpose/Objectives:** We are developing a partnership to train a behavioral therapist in sleep education (who, in turn, will train parents) within one community practice in Middle Tennessee. Our initial focus will be on autism spectrum disorders (ASD), given that 50-80% of children with ASD have sleep difficulties. The project will build upon federally-funded work that I led within our Autism Speaks Autism Treatment Network and that I have published with colleagues, including an award-winning book for parents, "Solving Sleep Problems in Children with Autism Spectrum Disorders, A Guide for Frazzled Families." The practice, Mercy Community Healthcare, serves diverse populations including the uninsured, and has a large population of children with neurodevelopmental disorders including ASD. Our long term objective is to disseminate our work within multiple pediatric practices (and conditions, not limited to ASD) across the Vanderbilt Health-Affiliated Network (VHAN). This project will provide value to VHAN and be a win-win-win-- for Vanderbilt, the community, and the families we serve by increasing access to behavioral sleep resources.

**Methods/Approach:** Twenty families of children with ASD (ages 4-12 years) receiving care at Mercy Community Healthcare will be enrolled in a four-week intervention after medical causes have been addressed. A behavioral therapist will meet with parents to deliver a brief behavioral intervention (60-90 minutes) and two 30-minute follow-up sessions (one and two weeks later). Parents will be asked to implement changes (e.g. increase exercise, decrease screen time, use a bedtime visual schedule/calming routine) and to record their children's sleep habits nightly. Measures of sleep (diaries, questionnaires, actigraphy), daytime behavior, and family functioning will be collected pre-treatment and after one month of treatment. A follow-up interview will assess parents' understanding and implementation of sleep education and other factors predictive of success (e.g., home environment, previous experience with educational materials). We have applied for grant support for this project.

### **Outcomes and Evaluation Strategy:**

1. Can we achieve effective training of the therapist and parents? We will videotape the therapist's sessions to code for fidelity by a psychologist who served as an educator of this curriculum. The fidelity checks encompass adherence to the manualized curriculum and communication with the parent (e.g., empathy, clear directions). Parent absorption, implementation, and comfort with the intervention will be assessed through a structured interview and rating sheet.
2. Do children's sleep patterns improve with the intervention? Our study is powered to detect clinically meaningful improvements in sleep with treatment. We will also generate hypotheses regarding predictors of success with behavioral sleep interventions.

# Implementing Parent-Based Sleep Education in Community Practice Settings



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Collaborators: W. Loring and L. Wang (Vanderbilt University), A. Vehec and M. Webb (Mercy Community Healthcare), and T. Katz (University of Colorado, Denver)



## Background

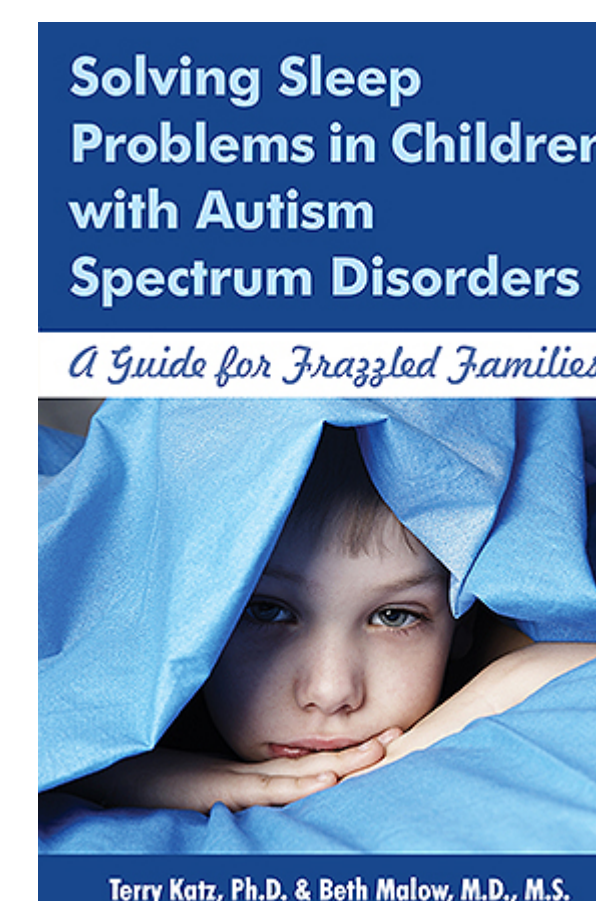
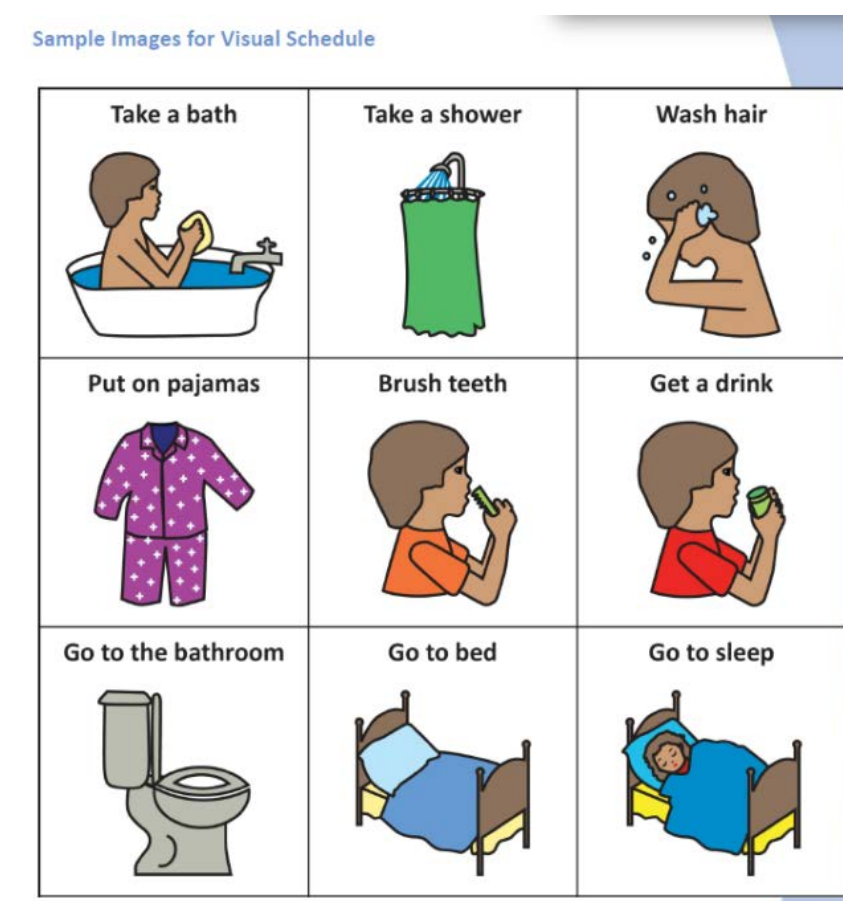
- Sleep difficulties in children are common and are a major source of stress to families, affecting child behavior and family functioning.
- While many factors contribute to sleep difficulties in children, behavioral approaches are often effective in improving sleep.
- Given limited access to care in academic medical centers, most families do not receive the education they need to help their children sleep.
- Bringing sleep education into community settings presents an opportunity to respond to this challenge.

## Purpose/Objectives

- Development of partnership to train a behavioral therapist in sleep education (who, in turn, will train parents) within one community practice in Tennessee.
- This practice, Mercy Community Healthcare, serves diverse populations including the uninsured.
- Our initial focus will be on autism spectrum disorders (ASD), given that 50-80% of children with ASD have sleep difficulties.
- Our long term objective is to disseminate our work within multiple pediatric practices (and conditions, not limited to ASD) across the Vanderbilt Health Affiliated Network (VHAN).

## Methods and Approach

- Twenty families of children with ASD (ages 4-12 years) receiving care at Mercy Community Healthcare will be enrolled in a 4-week intervention after medical causes have been addressed.
- A behavioral therapist will meet with parents to deliver a brief behavioral intervention (60-90 minutes) and two 30-minute follow-up sessions (one and two weeks later).
- Daytime and evening habits, bedtime routine, and parent interactions with children will be discussed..
- Measures of sleep (diaries, questionnaires, actigraphy), daytime behavior, and family functioning will be collected pre-treatment and after one month of treatment. A follow-up interview will assess parents' understanding and implementation of sleep education and other factors predictive of success.



## Evaluation Strategy

- Can we achieve effective training of the therapist and parents? We will videotape the therapist's sessions to code for fidelity by a psychologist who served as an educator of this curriculum. The fidelity checks encompass adherence to the manualized curriculum and communication with the parent (e.g., empathy, clear directions). Parent absorption, implementation, and comfort with the intervention will be assessed through a structured interview and rating sheet.
- Do children's sleep patterns improve with the intervention? Our study is powered to detect clinically meaningful improvements in sleep with treatment. We will also generate hypotheses regarding predictors of success with behavioral sleep interventions.

## Future Directions

- To expand our pilot work to several practices within our Vanderbilt Health Affiliated Network. We will include practices that are affiliated with free-standing therapy centers.
- To expand our patient population beyond autism spectrum disorders.
- To accomplish these goals, will continue to interact with Vanderbilt Health Affiliated Network Leadership as areas of focus, and clinical care guidelines, are developed.

## Summary

This project will allow us to pilot a brief behavioral sleep intervention within a community setting and provide a framework for future collaborations within our Vanderbilt Health Affiliated Network.