

Dr. Covington's research focuses on how family environments and social conditions shape sleep patterns in children. Her work aims to identify strategies that improve sleep behaviors and support child health and developmental outcomes.

The Challenge

Approximately **90% of children obtain less sleep than recommended**, and poor sleep health is linked to impaired cognitive, emotional, and physical development and increased risk of long-term disease. **Many families, particularly those experiencing socioeconomic or environmental challenges, face barriers to establishing safe and consistent sleep routines.** Understanding these barriers is essential to inform strategies that support early childhood healthy sleep habits.

The Approach

Dr. Covington...

- Uses objective **sleep monitoring technologies** (e.g., actigraphy) to measure sleep characteristics such as onset, duration, efficiency, and variability.
- Analyzes **national population datasets** to examine social, behavioral, and environmental determinants influencing sleep.
- **Conducts community-based research** to investigate how family caregiving practices and household environments influence sleep quality in young children.
- **Integrates family-level and environment data** to understand how social context shapes sleep behavior in underserved populations.

The Impact

- Demonstrated **that caregiver and child sleep patterns are closely aligned within households**, highlighting the importance of family-level approaches to improving sleep.
- **Identified household and environmental factors that can be modified** to influence sleep routines in young children.
- Generated evidence to inform family and community-based **strategies that promote sleep health** in children and caregivers.
- **Identified barriers** to adopting recommended sleep practices, **particularly in underserved communities.**

The investigator:

Dr. Covington is an assistant professor in the School of Nursing at the University of Delaware. She completed her B.A. in Biological Foundations of Behavior at Franklin and Marshall College, and her M.S. and Ph.D. in nursing at the University of Maryland. In addition to her research, Dr. Covington teaches pediatrics in UD's undergraduate nursing program and maintains her practice as a registered nurse in the pediatric intensive care unit at Sinai Hospital of Baltimore.

Find out more:

DE-CTR ACCEL: <https://www.de-ctr.org/>

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RESEARCH HIGHLIGHTS

Dr. Covington's research has resulted in...

- **Demonstrating that sleep health** in early childhood is strongly **shaped by family routines, caregiver behaviors, and household environment.**
- Identified modifiable family routines and household conditions that can **inform interventions to improve sleep health in young children.**
- Providing evidence to inform **state-level policy efforts supporting safe & healthy sleep in families.**

Key Benefits



CLINICAL

Helped clinicians understand how sleep patterns are influenced by family routines, caregiver schedules, and household environment.



CLINICAL

Developed family-centered approaches to assess and counsel caregivers about healthy sleep routines for young children.



COMMUNITY

Raised awareness among schools, community organizations, and family service programs that sleep disparities are shaped by social and environmental conditions.



POLICY

Convened local community members, leaders, organizations, and clinicians to inform state-level policy efforts supporting safe & healthy sleep in families.



POLICY

Member of a national safe sleep working group creating a "safe sleep roadmap" to make safe sleep accessible to all families.

Contact:

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