

Sleep Patterns and Wellbeing: A Comprehensive Analysis of Sleep's Influence on the Biopsychosocial Aspects in NDD and Mental Health

Stephanie Parker MD, Alyssa Smith
CA START Golden Gate

ABSTRACT

Understanding the intricate relationship between sleep and biopsychosocial aspects in individuals with Intellectual and Developmental is crucial. Sleep profoundly impacts cognitive function, emotional well-being, and social interactions. Through this descriptive data study, we reviewed records of people supported by the Golden Gate team, comparing the recognition of sleep disturbances at Intake and during crisis response. As with many other vulnerabilities in the IDD population, sleep concerns seem to be underreported and its impact underestimated. What we found is that although only 20% of the people CA START Golden Gate team supports have a sleep disturbance diagnosis at Intake, 71.4% of the people who have utilized the START Crisis Line report that sleep is a contributing factor to crisis.

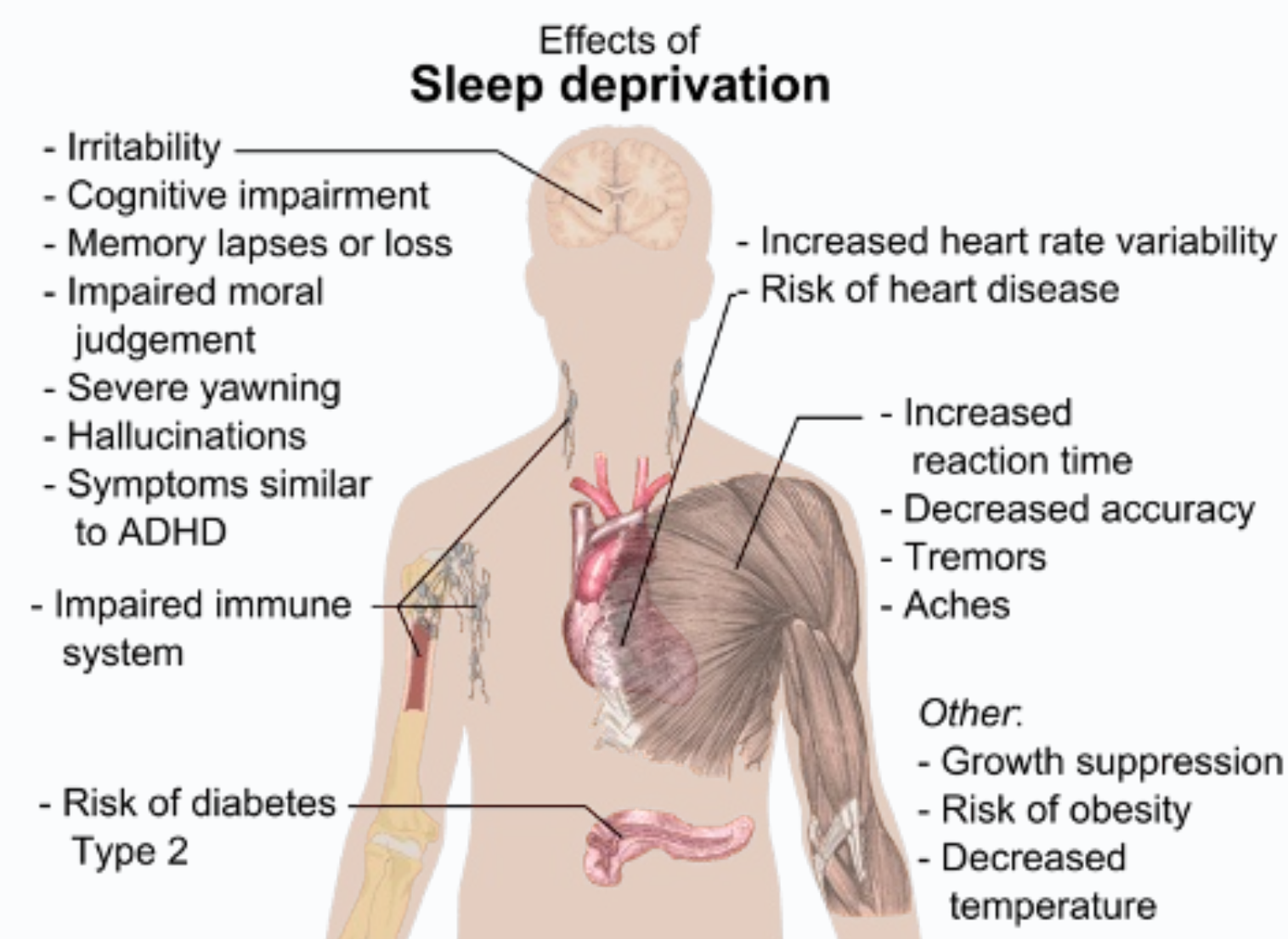
BIOPSYCHOSOCIAL BACKGROUND OF SLEEP

Sleep is a fundamental aspect of human wellbeing, influencing various biopsychosocial factors. Sleep deprivation can lead to numerous side effects, including impaired cognitive function, emotional dysregulation, and decreased physical health. Understanding the specific impact of sleep on individuals with Intellectual and Developmental Disabilities (I/DD) and mental health is crucial for providing targeted interventions and support.

Side Effects of Sleep Deprivation:

- Impaired cognitive function: Sleep deprivation impairs cognitive processes such as memory, attention, and decision-making, leading to decreased capacity for everyday activities.
- Emotional dysregulation: Lack of sleep can exacerbate changes in mood, irritability, and emotional dysregulation, contributing to mental health challenges such as anxiety and depression.
- Decreased physical health: Chronic sleep deprivation is associated with an increased risk of obesity, cardiovascular disease, diabetes, and compromised immune function, impacting overall physical health and longevity.
- Increased risk of mental health disorders: Sleep disturbances are linked to the onset and exacerbation of various mental health disorders, including depression, anxiety, acute trauma symptoms.
- Reduced quality of life: Persistent sleep problems diminish overall quality of life, affecting social relationships, daily functioning, and overall satisfaction with life.

"The Impact of Sleep on Learning and Behavior in Children with Neurodevelopmental Disorders: A Review of the Literature" by S. Malow et al. (2016): "Sleep plays a crucial role in learning, behavior, and overall wellbeing, particularly in children with neurodevelopmental disorders such as autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD). Sleep disturbances are common in these populations and are associated with academic difficulties, behavioral challenges, and compromised quality of life. Understanding and addressing sleep problems in children with neurodevelopmental disorders are essential for optimizing their developmental outcomes and enhancing their overall functioning."



MATERIALS AND METHOD

CA START Golden Gate reviewed records of all active cases currently served through March 2024. Total number of people: 77.

SIRS and record review included:

Referral documentation and START Intake Assessment: Does the person have a diagnosis of a sleep disturbance?

START Emergency Assessment: Is sleep mentioned as a factor that contributed to the crisis and/or is there a change identified in the "Primary Health" section of the RSQ.

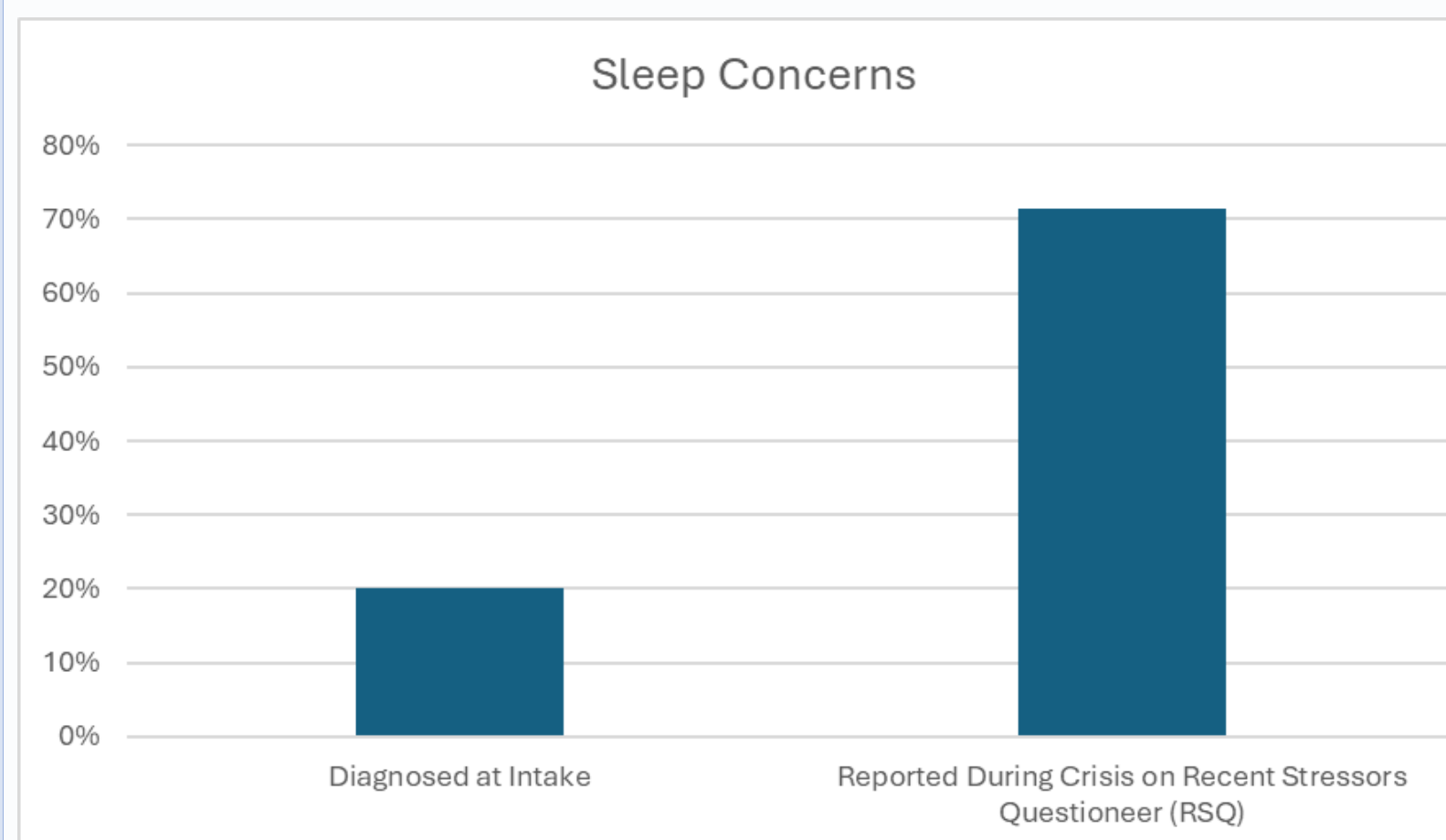
BIOLOGICAL QUESTIONS FROM THE START EMERGENCY ASSESSMENT

PRIMARY HEALTH (Check all that apply)			
A new medical problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A new medication was started or changed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vision or hearing loss/change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loss of mobility or decreased mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onset of falling or changes in gait	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The person seems as if they might be in pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any new or unusual movements of any kind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CPAP Machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urinary Incontinence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fecal Incontinence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Check only one "level" per factor)	Increased	Decreased	Same
Energy Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appetite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sleep Amount	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sexual Interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sexual Activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FINDINGS

20% of referrals accepted by START report a sleeping disorder at intake.

71.4 % of people we support that have experiences a crisis and have received crisis support from our team, have reported sleep being a factor contributing to crisis.



CONCLUSIONS

The findings of this project underscore the critical importance of addressing sleep patterns and disturbances among people with NDD and mental health conditions.

By recognizing and addressing sleep-related issues, implementing evidence-based interventions, and promoting healthy sleep habits we can significantly improve the overall wellbeing and quality of life for this vulnerable population. Further action is needed to understand the complex interplay between sleep and crisis, and to develop targeted interventions tailored to each person's unique needs.

NEXT STEPS

Creating awareness of the importance of sleep, particularly in the context of people with NDD and mental health conditions, requires a multi-faceted approach. Here are some of the identified next steps the CA START Golden Gate team will explore:

- Training START Team: utilize the MD and CD to enhance knowledge and skills in recognizing sleep disturbances and exploring further screening questions.
- Integrating psychoeducation on the importance of sleep into outreach and system meetings. Emphasizing the importance of recognizing sleep vulnerabilities and the impact to overall wellness.
- Implementing sleep trackers and utilizing Therapeutic Coaching to support the creation of better sleep habits.
- Identifying people/systems of support who would benefit from additional support through Clinical Consult to further understanding the biological vulnerabilities.
- Fostering partnerships with the community to promote sleep awareness and host events such as Clinical Education Teams (CETs) for collaboration and capacity building.

By implementing these strategies, Golden Gate START can create greater awareness of the importance of sleep and promote proactive efforts to address sleep concerns before they lead to crisis in the people we support, ultimately enhancing their overall wellbeing and quality of life.