Sleepless in the Pandemic?
Sleep in Parents with Children with Type 1 Diabetes (T1D)

Samantha A. Carreon, Iman Al-Gadi, KellyAnn Rooney, Christine H. Wang, Carrie Tully, Jasmine Jones, Katherine Gallagher, Maureen Monaghan, Randi Streisand, & Marisa E. Hilliard

INTRODUCTION

- Parents of youth with T1D have poorer sleep related to T1D management and worries.
- During the COVID-19 pandemic, managing T1D may be more demanding, and new stressors and routines can impact sleep.
- We compared parental sleep pre-pandemic to the initial months of the pandemic.

METHODS

- 100 parents of youth with T1D enrolled in RCT (within 2 months of diagnosis).
- Completed surveys at RCT completion (2017-19) and ≥6 months later (June/July 2020): Pittsburgh Sleep Quality Index (PSQI) adapted to include T1D-related sleep questions, and 2 sleep items from COVID-19 survey.
- Compared pre-pandemic vs. 2020 data using $\chi 2$ and paired samples t tests.

RESULTS

- Many parents (40%) reported moderate to extreme difficulty sleeping during the pandemic.
- From pre- to during the pandemic, PSQI Global and Latency scores significantly increased, indicating poorer overall quality and increased time it took to fall asleep.
- PSQI Duration and Daytime Dysfunction decreased, indicating greater amount of sleep and less daytime dysfunction.
- See tables for details.

DISCUSSION

- While stress related to the pandemic may have negatively impacted aspects of parental sleep (e.g., latency, overall quality), having children at home may have made T1D management easier and improved sleep duration.
- Parental sleep warrants clinical attention as it impacts psychosocial well-being and T1D management for families.

Parents of children with T1D experienced increased sleep challenges during the COVID-19 pandemic compared to pre-pandemic times, despite fewer T1D-related sleep disruptions and less daytime impairment.

Significant changes in parental sleep from pre- pandemic to during the COVID-19 pandemic (Summer 2020)

Variable	Pre-Pandemic (M±SD or %)	During Pandemic (M±SD or %)	*p*
PSQI - Sleep Latency	1.3 ± 1.1	1.5 ± 1.0	0.046
PSQI - Sleep Duration	0.9 ± 0.9	0.7 ± 0.9	0.024
PSQI - Daytime Dysfunction	0.9 ± 0.7	0.8 ± 0.7	0.035
PSQI Global Score ≥ 5	66%	72%	0.01
Sleep disruption due to overnight BG checks	61%	50%	0.001
Trouble sleeping due to child's healthcare needs (≥1/week)	59%	43%	0.001
Trouble sleeping due to stress related to child's health (≥1/week)	39%	35%	0.001

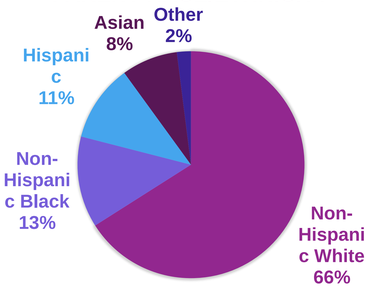
Note. BG = blood glucose; PSQI scores on 0-3 scale, higher=worse; PSQI Global Score ≥ 5 indicates clinically significant poor sleep quality

Abstract & Poster Available: bit.ly/PandemicT1DSleep | sxcarreo@texaschildrens.org | @DrSamCarreon

Participant Characteristics

Sample Demographics Collected During 2020 Pandemic (M±SD or %)	Parents (n=100)	Child with T1D
Age, Years	36.4 ± 6.8	6.7 ± 1.6
Gender, Female	98%	60%
Insurance Type, Private	-	67%
Diabetes Duration, Years	-	2.9 ± 0.5
HbA1c, %	-	8.2 ± 1.4%

PARENT RACE/ETHNICITY



Tables

Sleep factors that did not change from pre-pandemic to during the COVID-19 pandemic (Summer 2020)

Variables
PSQI - Overall Sleep Quality
PSQI - Sleep Disturbance
PSQI - Sleep Efficiency
Blood glucose checks at night

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Authors: Samantha A. Carreon, PhD[1], Iman Al-Gadi, MD[1], KellyAnn Rooney[2], Christine H. Wang, PhD[2], Carrie Tully[2,3], Jasmine Jones[1], Katherine Gallagher, PhD[1], Maureen Monaghan PhD[2,3], Randi Streisand, PhD[2,3], Marisa E Hilliard, PhD[1]

[1]Baylor College of Medicine & Texas Children's Hospital, Houston TX; [2]Children's National Hospital, Washington DC; [3]George Washington University School of Medicine, Washington DC

Sleepless in the Pandemic? Sleep in Parents with Children with Type 1 Diabetes (T1D)

Introduction: Parents of youth with T1D have poorer sleep due to T1D management and worries. During the COVID-19 pandemic, managing T1D may be more demanding, and new stressors and routines can impact sleep. We compared parental sleep pre-pandemic to the initial months of the pandemic.

Methods: Parents (n=100, 98% mothers) of youth with T1D (*M* age = 6.7±1.6 yrs, *M* duration = 2.9±.5 yrs) who were in a behavioral RCT completed surveys at RCT completion and ≥ 6 months later in June/July 2020. They completed the Pittsburgh Sleep Quality Index (PSQI) adapted to include T1D-related sleep questions, and 2 sleep items from a COVID-19 survey. *M* A1c at RCT completion = 8.2±1.4. We compared pre-pandemic vs. 2020 data using χ^2 and paired samples t tests.

Results: Many parents (40%) reported moderate-extreme difficulty sleeping during the pandemic. From pre- to during the pandemic, PSQI Latency scores increased significantly and Duration and Daytime Dysfunction decreased. More parents had PSQI Global Scores above the clinical cut-off during the pandemic. See table for details.

Conclusions: Parents of children with T1D experienced increased sleep challenges during the COVID-19 pandemic, despite lower T1D-related disruption and daytime impairment. Nighttime T1D management may have been less disruptive as parents slept less. Parental sleep warrants clinical attention as it impacts psychosocial well-being and T1D management for families.