

Conclusions: Our data highlights the implementation potential for delivering BA by nurses in an adolescent ambulatory setting. Qualitative themes suggest this approach (especially delivered via telehealth) is feasible and acceptable for youth with mild to moderate depressive symptoms.

Sources of Support: This project is supported by the Helen DeVos Children's Hospital Pediatric Research Fund.

130.

MINDFULNESS TECHNIQUES FOR STRESS AND ANXIETY IN ADOLESCENTS WITH TYPE 1 DIABETES

Kaitlyn Rechenberg, PhD, MPH, APRN¹, Amy L. Weiss, MD, MPH¹

¹USF Health.

Purpose: Type 1 diabetes mellitus (T1D) is one of the most prevalent chronic conditions in adolescents. Adolescents with T1D have higher rates of stress and anxiety than the general adolescent population. Mindfulness techniques, such as guided meditation, yoga, and body scan, are an evidence-based method of reducing stress and anxiety symptoms. However, these techniques have not been operationalized in adolescents with T1D. The purpose of this qualitative descriptive study was to provide an in-depth description of the perception and current use of mindfulness techniques to manage stress and anxiety in adolescents with T1D.

Methods: We used a qualitative descriptive approach, consisting of an in-depth, semi-structured interview comprised of 10 open-ended questions with follow-up probes. The analysis was guided by the principles of thematic analysis. We also collected demographic data and hemoglobin A1c. IRB approval was obtained prior to data collection.

Results: Twenty participants with T1D (ages 13 to 17, 60% identified as female, mean A1c 7.6%) engaged in an in-depth qualitative interview (mean duration 40 minutes). We identified 4 major themes: 1. Adolescents were exposed to mindfulness techniques previously, including breathing exercises and yoga, and most reported positive effects of practicing mindfulness; 2. Adolescents reported that mindfulness was a means of escape from constant cell phone and social media usage, reminders, and notifications –“you get to put your phone away for the full hour you're doing it”; 3. Several adolescents inadvertently used music as a way of cultivating mindfulness to “get away from everything” (most participants reported that listening to music was a way of escaping the external environment and shifting their focus internally, although most did not consider this a mindfulness practice); 4. Participation in a regular mindfulness practice was cost prohibitive to the majority of adolescents (most used a commercially available mobile health [mHealth] application and were not able to subscribe to access the full content). All adolescents endorsed an interest in an mHealth application that delivered mindfulness practices designed for teens, especially with customizable options (asynchronous, a variety of durations, multiple types of mindfulness practices to try).

Conclusions: Adolescents living with T1D experience high rates of stress and anxiety, impacting their chronic disease management and quality of life. Mindfulness is an evidence-based intervention that reduces stress and anxiety that has not yet been operationalized in adolescents with T1D. We found that adolescents with T1D have commonly been exposed to mindfulness techniques and are open to trying mindfulness in their daily lives. They value mindfulness practices as a means of “escaping” technology. Several adolescents

use music as a form of unintentional mindfulness practice, describing “eliminating external stimuli” and “zoning internally” while listening to music. Our results suggest that implementing a low-cost, accessible mHealth application that delivers mindfulness practices of variable durations may be an effective strategy for mitigating stress and anxiety in adolescents with T1D.

Sources of Support: n/a.

131.

VIRTUAL YOGA AND MINDFULNESS TRAINING AMONG JUVENILE COURT INVOLVED YOUTH

Nicholas Szoko, MD¹, Courtney Murphy, BS², Barbara Fuhrman, PhD², Felicia Savage Friedman, Med³, Maya Savage, BS³, Heather Manning³, Dominique Branson, BA², Sarah London, MSW², Elizabeth Miller, MD, PhD¹

¹UPMC Children's Hospital of Pittsburgh; ²University of Pittsburgh; ³YogaRoots on Location.

Purpose: Juvenile court involved youth (JCIY) experience unique psychosocial challenges. The COVID-19 pandemic generated additional stressors for this vulnerable population. Promoting mindfulness strategies may increase well-being among JCIY, but few such interventions have been developed. We sought to evaluate the impact of a longitudinal mindfulness intervention incorporating healing-centered, anti-oppression yoga delivered through a virtual platform on multiple psychological outcomes among JCIY involved in community-based monitoring.

Methods: We partnered with YogaRoots on Location (YROL), a healing-centered, anti-oppression yoga instruction group, to implement a longitudinal mindfulness training program to youth aged 11-21 involved in the Allegheny County Community Intensive Supervision Program (CISP). Starting in March 2020, this program transitioned to a remote format in light of the COVID-19 pandemic. Sessions were delivered via Zoom and incorporated Raja yoga practice, breathing techniques, meditation and mindfulness exercises, and strengths-based social justice exploration. Sessions lasted one hour and occurred weekly. Youth attending nine sessions completed end-of-program (EOP) evaluations. Baseline surveys assessed demographic characteristics and prior experiences with racism and trauma. EOP surveys were administered to assess for changes in multiple psychological outcomes: mindfulness, acceptance and action, resilience, future orientation, emotion dysregulation, and psychological distress. Demographic data were summarized with descriptive statistics. McNemar or Wilcoxon signed rank tests were used to compare outcomes at baseline and EOP.

Results: 99 youth completed baseline assessments. Mean age of participants was 16.2 (SD: 1.4). 85 (86%) were male. 60 (61%) identified as Black/African-American, 17 (17%) White, and 14 (14%) other racial identities. 7 (7%) were Hispanic/Latino. 74 (75%) youth reported prior experiences of trauma, with 47 (47%) reporting three or more. Perceptions of racism were common, with 63 (64%) youth reporting being treated unfairly by a police officer and 67 (68%) being accused of something they did not do at school. 16 youth (16%) completed EOP surveys. No significant changes in any psychological outcomes were noted from baseline to EOP among this cohort of youth who completed nine or more sessions. Many reported likelihood of using yoga in the future to deal with stress (11; 69%), to calm down (12; 75%), and to deal with racism (8; 50%).

Conclusions: JCIY face significant psychosocial stressors, and many report histories of trauma and discrimination. The COVID-19

pandemic may exacerbate existing challenges for these youth, and further supports are needed to engender well-being in this population, including strategies to retain youth in programming. Despite its feasibility and acceptability among JCIY, mindfulness training, particularly in a virtual format, may have limited immediate impact on psychological outcomes due to broader structures of oppression and situational factors. Reflecting the transiency of this population, changing living situations, going “on the run,” and other challenges, retaining youth in ongoing programming is challenging. Additional follow-up is needed to determine the effects of such interventions on long-term youth coping and resilience as well as to elucidate implementation facilitators to increase receipt of such skills-building programs for this population.

Sources of Support: Heinz Endowments.

RESEARCH POSTER PRESENTATION II: MENTAL HEALTH/COVID

132.

MENTAL HEALTH INTERVENTIONS PRACTICED BY SCHOOL NURSES AND CHANGES DUE TO COVID-19

Ashwini R. Hoskote, MPH RN¹, Karen E. Johnson, PhD, RN, FSAHM, FAAN¹

¹University of Texas at Austin.

Purpose: Trends from national surveys of high school students indicate that mental health indicators, such as sadness and suicidal ideation are increasing. COVID-19 has exacerbated this issue in adolescents for myriad reasons including social isolation and family economic difficulties. The importance of school nurses in addressing student mental health has been highlighted by the pandemic, but little is known about their experiences addressing mental health in general or during the pandemic. The purpose of this study was to present the opinions of school nurses regarding the severity of mental health concerns, as well as whether COVID-19 has changed the frequency of mental health concerns for their students.

Methods: We administered a 50-item Qualtrics survey to a national sample of school nurses (n=2536, 79% full time, 58.1% urban/suburban schools, 42% registered nurse) working with adolescents in grades 6-12 in the United States between April and June 2021. Severity of seven mental health concerns (disruptive behavior, short attention span, anxiety, depressive symptoms, trauma, suicidal thoughts, and social skills/peer relationship) were rated on a scale ranging from “not sure” (1) to “severe problem” (6). We calculated descriptive statistics to demonstrate school nurse perceptions of the severity of mental concerns seen in their students and whether the frequency of mental health concerns had changed after COVID-19.

Results: The average severity of the seven mental health concerns was 3.64 (SD= .97), with depressive symptoms (mean= 3.80, SD=1.32) and anxiety (mean =3.76, SD=1.26) being reported as the most severe. Over half of school nurses indicated that COVID-19 changed mental health practices in the care coordination principle (53.6%) with students, while less than half reported that practices in other principles changed. Additionally, 49.7% of school nurses reported that the number of students visiting the nurse with mental health concerns after COVID-19 has increased, while 36.3% reported no change, and 12.5% reported fewer students than usual.

Conclusions: Our descriptive study offers important and novel information showing that school nurses are an important resource for adolescents in addressing mental health concerns and how COVID-19

has impacted their efforts. Given that there may be continued impacts on student mental health, above and beyond the concerns that already existed, as the pandemic continues, it is vital to better understand how to support school nurses in addressing mental health. More research is needed to specifically determine what resources can be provided to school nurses to support their practices in order to improve mental health outcomes of adolescents.

Sources of Support: Robert Wood Johnson Foundation, Future of Nursing Scholars Program.

133.

EXPLORING THE LINK BETWEEN SEDENTARY BEHAVIOR AND MENTAL HEALTH OUTCOMES IN BRITISH COLUMBIA YOUTH DURING THE COVID-19 PANDEMIC

Akash Sharma¹, David Long, MD², Hasina Samji, PhD³

¹Pacific Northwest University of Health Sciences; ²University of British Columbia; ³Simon Fraser University.

Purpose: Studies before the pandemic estimated that only 8% of Canadian adolescents met the Canadian 24-Hour Movement Guidelines for limiting non-school related sedentary behavior (SB) and screen time to 2 hours or fewer per day. Studies have shown that increased SB in youth is related to an increase in adverse mental health outcomes (MHO), but evidence of this effect during the COVID-19 pandemic is limited. With the large-scale adoption of on-line schooling due to COVID-19 in many regions, youth may be facing increased SB resulting in increased adverse MHO. This study aims to elucidate the relationship between SB and MHO to inform future research and policy implementation.

Methods: The study sample was derived from the Youth Development Instrument (YDI), a comprehensive self-reported survey of social and emotional development, health, and well-being of Grade 11 students piloted in participating British Columbia (BC) school districts from February 2021 to June 2021. The YDI questionnaire had a total sample size of 2350; after removing 44 outliers, 2306 participants remained for analysis. Of these, 1045 identified as female, 1152 as male, and 109 in another way or did not specify. The Mean Family Affluence Scale indicator score for the population was 9.5 ± 2.1 which indicated high affluence. Questions in the YDI pertaining to SB, physical activity (PA), depression, and anxiety were selected. SB was defined as hours of daily screen use for non-school related activities. PA was defined as weekly frequency of activities lasting at least 60 mins that increased heart rate and made the student feel out of breath. Depressive symptoms were screened via the Patient Health Questionnaire (PHQ8) and generalized anxiety via the Generalized Anxiety Disorder (GAD2) measure. Significance of linear associations was tested by linear regression, and group mean difference by t test. Statistical analysis and graphing were performed through RStudio.

Results: Depression and anxiety were common in this sample. 39.8% of students reported a PHQ8 score ≥ 10 , and 43.2% of participants reported a GAD2 score ≥ 3 . 86% of participants did not meet the recommended guidelines of limiting SB to 2 or fewer hours a day. SB and depressive symptoms had a highly significant association in this population ($p < 0.001$). Students meeting SB guidelines had a mean PHQ8 of 7.4 ± 6.5 , compared to a mean PHQ8 of 9.0 ± 6.8 in participants not meeting SB guidelines ($p < 0.001$). The relationship between SB and GAD2 score was also highly significant ($p < 0.001$). Furthermore, there was a significant inverse relationship observed between SB and PA ($p < 0.001$).