



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

significantly more topics than parents of youth who were abstinent. Parent-YCMC conversations about alcohol may represent a response to youth use, rather than primary prevention.

Sources of Support: Conrad N Hilton Foundation 20140273, R25DA033211, HRSA/MCHB LEAH grant T71MC00009, HRSA 1T25HP37594-01-00.

138.

RELATIONSHIPS BETWEEN FOOD INSECURITY, BMI, WEIGHT CONCERNS, AND UNHEALTHY WEIGHT LOSS BEHAVIORS IN ADOLESCENTS

Hannah Canter, MD¹, Jeanelle Sheeder, MSPH, PhD², Jennifer L. Woods, MD, MS, MEd, FSAHM, FAAP¹

¹Children's Hospital Colorado, Section of Adolescent Medicine; ²School of Medicine at University of Colorado.

Purpose: Food insecurity impacts millions of people in the United States annually. In 2021, 12.4% of all U.S. households with children were food insecure and 9.3 million children and adolescents were affected. At the same time, obesity continues to be a major public health concern in the U.S. From 2017–2020, the prevalence of obesity was 22.2% in adolescents aged 12–19 years. Lack of access to adequate, healthful food has been linked to obesity, mental health concerns, and disordered eating in adults. The objective of this study was to examine the relationships between food insecurity and BMI, patient concern about weight, and unhealthy weight loss behaviors in adolescents.

Methods: Patients presenting for well adolescent visits between July 2020 and July 2021 who completed a 2-item food insecurity screening tool and a nutrition questionnaire as part of their visit were included in the study. We compared patients who reported being food insecure to those who were food secure using bivariate statistics. This study was approved by the Colorado Multiple Institutional Review Board.

Results: Of 618 patients, ages 12–17 (median:15.7 years), 7% reported food insecurity. They were similar to food secure patients in age, sex, race, ethnicity, and insurance type. Food insecure patients had significantly higher weight (74.6 kg vs. 63.6 kg; $p=0.025$), BMI (28.2 kg/m² vs. 23.2 kg/m²; $p=0.011$), and BMI percentile (96.4th percentile vs. 81.6th percentile; $p<0.009$). Furthermore, 55.8% of food insecure patients were obese (BMI \geq 95th percentile), compared to 23.5% of those who were food secure ($p<0.001$). Food insecure patients also reported higher rates of concern about weight (62.8% vs. 43.7%; $p=0.008$). However, self-report of unhealthy weight loss behaviors was similar between the groups (16.7% vs. 14.6%, $p=0.14$).

Conclusions: The prevalence of food insecurity was lower in this study population than the rate that is reported nationally, likely related to less sensitive screening methods. Additionally, the prevalence of obesity was higher than expected based on most recent national data. Further research should focus on examining the longitudinal relationship between food insecurity and obesity among adolescents; as well as specific unhealthy weight loss and disordered eating behaviors that food insecure patients may be disproportionately affected by.

Sources of Support: Section of Adolescent Medicine.

139.

IMPACT OF THE COVID-19 PANDEMIC ON CHLAMYDIA AND GONORRHEA TESTING AND CARE IN MILITARY CONNECTED ADOLESCENTS

Binny Chokshi, MD, Med¹, Apryl Susi¹, Elizabeth Hisle-Gorman, PhD¹, Jill Brown, MD¹, Michael Rajnik¹, Cade Nylund, MD¹

¹Uniformed Services University of the Health Sciences.

Purpose: To explore the impact of constrained healthcare resources, together with limited healthcare access during the COVID-19 pandemic, on adolescent sexual health care delivery, including Chlamydia trachomatis (CT) and Neisseria gonorrhea (GC) testing and care.

Methods: This retrospective cohort study queried Military Health System (MHS) Data Repository (MDR) records of military connected dependents aged 13–17 from February 2019–Feb 2020 (pre-pandemic (PP)) and March 2020–July 2021 (COVID-19 pandemic (CP)). We calculated monthly infection rates using clinical encounters with an ICD10 code indicating gonorrhea and chlamydia. We calculated CT/GC testing rates and percent positivity rates using outpatient lab records. We utilized unadjusted and adjusted Poisson regression analysis to calculate rates by age, sex, sponsor rank (proxy for socio-economic status) and PP and CP time periods. We used Joinpoint software to evaluate trends in testing and percent positivity over the study period.

Results: A monthly average of 533,761 military beneficiaries were included, 51% were male, 40% 13–15 years old, 60% 15–17 years old, 6% had junior enlisted (JE) parents, 26% officer/other, and 68% senior enlisted (SE) parents. Over the study period, CT clinical encounter rates were higher in females (RR 6.6, 95%CI 5.7–7.7), those aged 16–17 (RR 9.3, 95%CI 8.0–10.8) and those with a JE parent, vs. SE (RR 1.7, 95% CI 1.44–2.04). GC clinical encounters were also higher in females (RR 2.9, 95% CI 2.4–3.5), 16–17 year olds (RR 8.9, 95% CI 7.1–11.3), and JE sponsors vs. SE (RR 1.3, 95%CI 0.98–1.8). After adjusting for sex, age, and sponsor rank, rate of adolescent encounters for CT was lower during the CP time period (CT aRR: 0.52, 95%CI 0.51–0.62), whereas GC encounters were not significantly different by time period GC (aRR: 1.03, 95%CI: 0.87–1.2). CT and GC testing initially decreased 30% (Jan–Mar 2020), increased 30% (May–June 2020), and then steadily declined 2.5% monthly from July 2020–July 2021. CT percent positivity was overall steady in the PP period (5–7%) increased in April (11%) and May (9%) 2020, then decreased starting June 2020 (7%) through July 2021 (4%). There was no change in GC test positivity.

Conclusions: Encounters for CT were less frequent during the COVID-19 pandemic for military connected adolescents, with no change in GC encounters, which may relate to the often symptomatic nature of GC prompting individuals to seek care in spite of the pandemics related barriers. Testing for GC/CT showed a precipitous drop in testing between Jan 2020–May 2020, and though testing has subsequently increased, rates have not reached PP levels. The trends in percent positivity suggest that despite decreased encounters for CT related care, symptomatic individuals still sought care. As we move into a post-pandemic area, opportunities to reengage adolescents in sexual healthcare and optimize opportunities for feasible and accessible solutions to provide STI screening services should be sought out.

Sources of Support: Uniformed Services University VPR Intramural funding.

140.

ACCEPTABILITY OF MAIL-IN SELF-COLLECTION FOR GONORRHEA AND CHLAMYDIA SCREENING IN PRIMARY CARE CLINICS

Tana Chongsawat, MD, MPH¹, Paula Cody, MD, MPH¹

¹University of Wisconsin-Madison.

Purpose: The United States has seen a rise in sexually transmitted infections (STIs); the need to increase access for screening is essential to reverse this trend, especially for vulnerable populations such as LGBT+ individuals, people of color, or those at a low socioeconomic status. This study's primary objective is to assess preferences for mail-in STI screening among participants assigned female at birth already established with a primary care clinic. The study aims to provide insight into the need for clinicians to adopt mail-in testing for patients to improve screening access.

Methods: Participants were recruited for this cross-sectional study from a clinical database of established patients with a focus on USPSTF recommendations for STI screening such as assigned female at birth (AFAB) and aged 18–24 years. Recruitment was done through a mailer from September to October 2021, inviting participants to complete an online survey. Statistical analyses were conducted using SAS software (SAS Institute Inc., Cary NC), version 9.4.

Results: Overall, there was a higher preference for home testing (61/88 = 0.69, 95% CI 0.59–0.79) among respondents. LGBT+ identity, age, recent clinical encounter, relationship status, living situation, or race and/or ethnicity, were not statistically significant associated with preference for home testing. However, there were lower odds for preferring home collection among participants with less education (OR 0.25, 95% CI 0.08–0.77, $p < 0.05$), who lacked insurance (OR 0.19, 95% CI 0.06–0.67, $p < 0.05$), or were unemployed (OR 0.28, 95% CI 0.08–0.95; $p < 0.05$).

Conclusions: Results from this survey indicate the desire for home testing among individuals from all demographics, influenced by social determinants of health such as education level and employment and insurance status. With overall acceptability for self-collection STI screening through mail-in methods (61/88=0.69; 95% CI 0.59–0.79). The rising rates of STIs among young adults and delays in routine STI services secondary due to the ongoing COVID-19 pandemic and budget cuts emphasize the importance of new approaches to STI screening. Primary care clinics can expand needed screening by integrating such methods into workflows for established patients. These findings indicate a need for innovative outreach efforts to curb rising rates of STIs in the United States with additional consideration for research specific to LGBT+ health care needs, updated USPSTF recommendations for screening, and inclusive public health messaging.

Sources of Support: Dr. Tana Chongsawat was supported by the University of Wisconsin Primary Care Research Fellowship, funded by grant T32HP10010 from the Health Resources and Services Administration. The study was funded by a small grant by the University of Wisconsin Department of Pediatrics.

141.

"KEEP YOUR HEAD UP": USING QUALITATIVE METHODS AND THE THEORY OF PLANNED BEHAVIOR TO DESCRIBE COACH COMMUNICATION WITH YOUTH ATHLETES ABOUT PHYSICAL CONTACT

Sara P.D. Chrisman, MD, MPH¹, Emily Kroshus, SciD, MPH¹, Rachel J. Hays, MPH², Erin Kinney, BA³, Kiana Hafferty, BA⁴, Tamerah Hunt, ATC, PhD⁵, Beth J. Bollinger, PhD⁴, Stephanie Walsh⁵, George Chiampas, DO⁶, Dane Ramshaw⁷, Kirsten D. Senturia, MA, PhD⁸, Ann Glang, PhD⁷

¹Seattle Children's Research Institute/ University of Washington; ²Kaiser Permanente; ³Oregon Health & Science University, School of Medicine;

⁴Seattle Children's Research Institute; ⁵Georgia Southern University;

⁶Northwestern University and U.S. Soccer; ⁷University of Oregon;

⁸Senturia & Rabkin Consulting.

Purpose: Contact with other players, objects or the ground is an unavoidable part of youth sports, but also associated with injury risk such as concussion. Certain types of contact (e.g., tackling with head lowered) are particularly dangerous, and rules have been instituted to limit these types of contact in youth sports. Communication with youth athletes about good and bad physical contact could potentially be an important strategy towards decreasing injury risk in youth sport, but little is known about factors affecting such communication. We chose to fill this gap by interviewing adult stakeholders in youth sport.

Methods: We conducted a qualitative interview study with n=49 adult stakeholders in youth football and soccer (coaches, referees and administrators) in two geographic regions to better understand barriers and facilitators to adult communication about physical contact with youth athletes. We viewed communication about physical contact through the lens of the Theory of Planned Behavior, conducting interviews that covered knowledge/ experience, attitudes/ beliefs, norms/ values and perceived behavioral control.

Results: All stakeholders were able to describe types of contact they felt were "good," like keeping head up (football) and going shoulder-to-shoulder (soccer), and "bad," like targeting/ spearing (football) and high kicking/ tripping (soccer). They also described the importance of sportsmanship and playing by the rules. Stakeholders believed certain types of contact, such as tackling with head lowered or aggressive retaliation, were associated with greater risk of injury, even if such contact was not always preventable due to misjudgment or player error. Management of physical contact was felt to be critical to sport and thought of as a shared responsibility between all key stakeholders, but a particular responsibility for coaches as they could emphasize appropriate physical contact both during practice and after game play. Referees were responsible for calling out bad physical contact during a game, and parents were key for reinforcing this messaging, even though respondents felt these roles were not always followed. Coaches felt comfortable talking about physical contact with their players, but noted they did not always feel like such discussions were supported by their community. They also emphasized the importance of phrasing these discussions positively ("lead with head up" rather than "do not put your head down") to improve likelihood of shifting behavior.

Conclusions: Coaches and other adult stakeholders in youth sport have a clear vision of types of physical contact that are "good" and "bad," and understand that certain types of physical contact are associated with greater injury risk. They also believe that adult stakeholders, particularly coaches, referees and parents, can play a key role in providing guidance to youth regarding good and bad physical contact. Coach communication about physical contact with youth athletes presents a potential target for education programs, with a goal of reducing risk of injuries such as concussion.

Sources of Support: This work was made possible by a grant from the Centers for Disease Control and Prevention, U01CE002880.