THE AVAILABILITY OF HIV AND SEXUALLY TRANSMITTED INFECTION TESTING AND TREATMENT SERVICES AT CRISIS PREGNANCY CENTERS IN THE UNITED STATES
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Purpose: Crisis pregnancy centers (CPCs) are nonprofit organizations with a primary mission of dissuading pregnant people from seeking abortion, often using misinformation and deceptive tactics. Other aims include Christian evangelism and promoting sexual abstinence before marriage. The centers are increasingly becoming medicalized and gaining substantial US government funding and support. In 2019, CPCs were newly awarded Title X family planning and Teen Pregnancy Prevention Program funds to provide sexual and reproductive health services and programming. CPCs particularly advertise their services to young people, who are at disproportionately high risk for sexually transmitted infections (STIs). We sought to describe the number and proportion of CPCs in the US that offer HIV/STI testing, treatment, and referral services.

Methods: We used CPC Map, an online geocoded directory of CPCs in the United States (U.S.), to identify all of the CPCs currently operating the U.S. From December, 2018 to August, 2019, we assessed STI services advertised on proprietary client-facing CPC websites and used a standard call script to inquire about CPCs’ STI services. Referrals for HIV/STI testing and treatment services were not requested during calls but were recorded.

Results: Of the 2,539 previously identified CPCs, we successfully reached 2,471 (97.3%) via telephone. Of those reached, 511 (20.7%) advertised STI testing on their websites, 291 (11.8%) STI treatment, and 116 (4.7%) HIV testing. A total of 546 (22.1%) CPCs confirmed by phone that they offered STI testing. By state, the percentage of CPCs offering STI testing ranged from 0% (Alaska, Delaware, District of Columbia, Hawaii, Nevada) to 55.6% (Colorado). Only 373 (15.1%) of CPCs reported providing treatment for any STI, and 158 (6.4%) CPCs in 32 states reported offering expedited partner therapy. A total of 198 (8.1%) CPCs confirmed by phone that they offered HIV testing. By state, the proportion of CPCs that offered HIV testing ranged from 0% (16 states) to 44.4% (Montana). A total of 873 (35.3%) CPCs spontaneously provided a referral for STI testing, 221 (8.9%) provided a referral for STI treatment, and 186 (7.5%) provided a referral for HIV-related services.

Conclusions: CPCs extend the availability of HIV/STI services in the U.S. However, only a minority of CPCs offer HIV/STI services, including proactive referrals. In particular, only small proportions of CPCs offer STI treatment or HIV testing services. Given high levels of inaccurate health information provided by CPCs; CPC policies against providing and promoting contraception, including condom use; and the centers’ focus on abstinence only until marriage, adolescent health and medicine professionals should aim to increase awareness about the limitations of CPC services among adolescents and young adults and help them identify safe, quality sources of care and information.

Sources of Support: N/A
FROM BOTS TO JOKES: IS THERE A PLACE FOR HIV PREVENTION ON TWITTER?
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Purpose: Adolescents and young adults (AYA) account for over 20% of new HIV infections in the US, with the majority of new cases among males. Social media is a dominant force in the lives of young men and represents an important, source of information and discussion regarding HIV risk and prevention. Despite this, little is known about the content of online conversations about HIV among AYA men. To fill this gap, our study investigates online discourse about HIV through a rigorous qualitative analysis of popular HIV-related tweets by young men in the U.S.

Methods: This qualitative study analyzed HIV-related tweets posted by Twitter users, with predicted male sex and age 13-25 from February 2012 to November 2017. The tweets were retrieved from the Twitter garden house API. Natural language processing techniques were used to predict user age, gender and cull tweets using HIV relevant keywords. Our classifier positively identified approximately 72% of relevant English U.S. tweets. We excluded tweets from institutions, agencies, and other entities based on designed computer algorithms and examination of Twitter profiles. We conducted a qualitative content analysis with a subset of 472 of the most retweeted and favorited tweets from our data set of 5,600 HIV prevention-related tweets and 12,5000 general sex-related tweets. We used two trained coders to identify emergent themes who reached approximately 90% agreement. We finalized theme analysis through team consensus on the emergent themes.

Results: Three overarching themes arose in the analysis, “othering”, “political/activism”, and “behavior-related” tweets. The sample featured 34.33% othering codes which focused on alienating individuals with HIV and LGBTQ members by using jokes and insults about one’s identity to generate stigma. These tweets included categories of sexual orientation, gender identity, and other’s HIV status reveal. Political and activism tweets accounted for 25.45% of all codes. The tweets focused on awareness and anti-stigma sentiments about HIV criminalization and violence as well as LGBTQ and women’s rights. The third theme contained tweets endorsing risk and health behaviors. There were 7.91% risk promoting codes and 4.71% health-promoting codes. Risk codes promoted sex practices like multiple partners, cheating, condomless sex, and concurrent substance use. Health-promoting codes discussed engaging in safe sex practices like PrEP and condom use, maintaining undetectable viral load, medicine adherence, as well as STI testing. Of note we uncovered evidence of tweets about HIV by potentially politically-motivated bots which were excluded from our analysis, but were often the most retweeted messages.

Conclusions: Tweets from youth and other entities including bots may provide key insight into prevalent themes in online discourse about HIV among young men in the US. Tweets containing jokes were often the most retweeted and favorited, suggesting that social media may be a platform for propagating HIV-related stigma. Further, our data suggest that acceptability of risky sexual behavior is high among AYA male twitter users. These findings have important implications for developing both online and in person clinical HIV prevention interventions which address stigma and sexual risk behavior among young men.

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WHERE CAN SOUTHERN GIRLS GO FOR PREP? EXAMINING THE PREP-PROVIDING PRACTICES OF TITLE-X FUNDED FAMILY PLANNING CLINICS ACROSS THE SOUTHERN US

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Purpose: Pre-exposure prophylaxis (PrEP) for HIV prevention is dramatically underutilized by women of all ages in the US, particularly among young women in the Southern US who are disproportionately affected by HIV. Improving PrEP access is a key component of increasing PrEP uptake among women. Title X-funded family planning clinics have been identified as potentially ideal PrEP delivery sites for women. Yet little is known about the extent to which PrEP is provided in these settings, nor about the barriers and facilitators to PrEP provision. We examined PrEP provision practices and resource-related considerations for PrEP provision in Title X-funded clinics across the Southern US.

Methods: We utilized an explanatory, sequential mixed-methods design to explore models of PrEP implementation in Title X-funded clinics. We conducted a web-based, geographically-targeted survey from February-July 2018, followed by key informant interviews among clinicians and administrators of Title X-funded clinics across 18 states that comprise the Southern US. The survey included questions on implementation of PrEP services. Interviews assessed barriers and facilitators to integrating PrEP into clinic services using implementation-focused constructs from the Consolidated Framework for Implementation Research. A total of 529 individuals completed the survey, representing 285 unique Title X clinics across the South; 39 representatives were purposively sampled from unique clinics to participate in interviews.

Results: 109 respondents (20%) reported working in PrEP-providing clinics (62 clinics); 58 were urban-located, and 4 rural-located. Based on interviews from 39 clinics, we classified each clinic by which steps of the PrEP cascade they implemented (1: Screen for HIV risk, 2: Educate, 3: Assess candidacy via labs, 4: Prescribe, 5: Monitor). Of the 39 clinics, 24 conducted at least one step in the PrEP cascade; 8 clinics screened only and referred; 4 screened and educated about PrEP, then referred; 12 provided all steps on-site. Across clinics implementing Step 1, few barriers were identified; having a formal screening tool, having it integrated into electronic medical records, and having support staff to screen prior to appointment were facilitators. For clinics also doing Step 2, PrEP educational materials facilitated the process; clinics not providing education believed they could easily do this step with training and educational resources. Clinics doing Steps 1 & 2 reported funding-related barriers for providing lab testing (Step 3). For clinics doing all steps, once they received training as well as funding (grants or state provided) to cover the costs of lab testing, they faced very few barriers to conducting Steps 3-5 of the cascade. However, they also reported presence of staff to assist with insurance/cost navigation, appointment reminders and education/screening as facilitators for doing so. Lack of support staff was a critical barrier for the remaining clinics for offering onsite PrEP services.

Conclusions: Efforts are needed to improve PrEP access for women seeking sexual health care in Title X clinics in the Southern US. As referral models introduce additional patient burden for accessing PrEP, increasing onsite PrEP services in Title X clinics will require addressing resource concerns (training, cost and staffing) in these otherwise ideal PrEP-delivery sites.
PREVALENCE OF EXTRAGENITAL GONORRHEA AND CHLAMYDIA AMONG YOUTH INVOLVED IN THE JUVENILE JUSTICE SYSTEM
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Purpose: Using urine-based screening, the prevalence of Chlamydia trachomatis (CT) and Neisseria gonorrhoea (NG) among male detained youth has been reported to be 5.9% to 14.4%, and 0.6% to 6.7% respectively, and 9.5% to 32.5% and 5.1% to 18% for females. Emerging evidence has demonstrated that testing sexually active adolescents and adults for CT and NG in the urine only misses a substantial number of these infections. In October, 2018, the medical providers at a large, urban juvenile detention facility in the Southeastern United States started offering pharyngeal and anorectal testing for youth presenting to the medical clinic. The intake physical form was also modified to include questions about oral and anal sex. Very little is known about the prevalence of extragenital CT and NG infections among youth involved in the juvenile justice system. Therefore we set out to examine risk factors and rates of extragenital infections among this population.

Methods: Youth presenting to the medical clinic for their intake physical or a sick visit related to a sexually transmitted infection are offered extragenital testing. Tests for pharyngeal and anorectal CT and NG are processed through the local City Health Department lab using a nucleic amplification PCR test. A retrospective chart review was conducted from October 1st 2018 to May 31st 2019. Only charts of youth who were seen by a physician were included. Information from the clinic visits along with the test results were abstracted and entered into an Excel Spreadsheet. This study was approved both by the University of Texas Health Science Center and the Juvenile Justice Center internal review boards.

Results: 741 youth were seen by medical providers during this time period; 78.1 % were male. Mean age was 15.3 (range 11 to 17), 49.5% were black. Of these youth 36.3% reported performing oral sex, and 4.3% reported receiving anal sex. Of those reporting oral sex, 33.5% had an oral swab sent for testing; 2.35% were positive for CT, 2.35% were positive for GC. Of those reporting anal sex, 25.9% had an anal swab sent and 42.9% were positive for CT, none were positive for GC. Of those youth with a positive oral or anal test (for either CT or GC), 25% had a negative urine test for these infections. Associated risk factors for having a positive extragenital test were lack of condom use, and more than 2 partners over a 12 month period.

Conclusions: Adding screening questions about oral and anal sex improved identifying youth at risk for extragenital infections, however a majority of these youth were still not tested at these sites. A quarter of the youth who were positive for an extragenital infection had a negative test in their urine, emphasizing the importance of testing at all three sites when indicated. Future efforts to further improve the screening and testing process at our facility will be important to ensure appropriate counseling, diagnosis and treatment.

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PREDICTORS OF PREP AWARENESS IN ADOLESCENT AND YOUNG ADULT GAY, BISEXUAL, AND OTHER MSM IN BALTIMORE

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Purpose: HIV disparities continue to impact young, gay bisexual and other men who have sex with men (MSM). The highest rates of new diagnoses are among those age 25-34 years and 13-24 years. Pre-exposure prophylaxis (PrEP) is a potential tool for reducing these disparities if promotion and delivery is prioritized to those at greatest risk. The study objective is to investigate sociodemographic characteristics, HIV/STI testing history and HIV acquisition risk factors associated with PrEP awareness among 18-34 year-old HIV-negative MSM in Baltimore.

Methods: Data for this study were drawn from two behavioral surveys among MSM in Baltimore: The BESURE Study, the Baltimore arm of the National HIV Behavioral Surveillance Project (2017), and the Safe Spaces and Places Study (SSP) (2018 to 2019). Self-reported HIV-negative MSM age 18-34 years (N=269; SSP N=71; BESURE N=198) were included in this analysis. PrEP awareness was assessed through the question “Before today, have you ever heard of people who do not have HIV taking PrEP to reduce the risk of getting HIV?” [No/Yes]. Covariates included demographic characteristics (age, race [Black vs. non-Black], education level, income), receipt of HIV or STI test in the past 12 months, and HIV acquisition risk factors in the past 12 months (as defined by the Centers for Disease Control: sex with person living with HIV, condomless sex, multiple sex partners, recent bacterial STI diagnosis and exchange sex [money/drugs given/received for sex]). Using STATA 15, multivariable logistic regression was used to determine characteristics associated with PrEP awareness, adjusting for the year of data collection. Using stepwise regression, we ran the following three models: 1) demographic characteristics; 2) demographics and receipt of HIV/STI test; and 3) demographics, receipt of HIV/STI test, and HIV acquisition risk factors.

Results: The mean age was 27.7, S.D=3.8. The majority were Black (68.1%), had completed high school/GED (61.7%), and earned <$50,000 annually (83%). 82.8% were aware of PrEP. In model 1, education level < high school/GED (ref:college degree) was associated with reduced odds of PrEP awareness (aOR=0.21; CI=0.06-0.82). In model 2, Black race (aOR=0.36; CI=0.014-0.93) and income <$10,000 (ref: >$50,000) (aOR=0.16; CI=0.03-0.87) was associated with reduced odds of awareness; recent HIV/STI testing was associated with increased odds of awareness (aOR=6.98; CI=2.88-16.95). In the final model, race, income and education were not associated with awareness; however reporting exchange sex (12% prevalence) was associated with 91% lower odds of being aware of PrEP (aOR=0.09; CI=0.02-0.47) and reporting recent HIV/STI testing (87% prevalence) had 6 times the odds of being aware of PrEP (aOR=6.6; 95% CI=1.85-23.68).

Conclusions: Our findings indicate that for adolescent and young adult HIV-negative MSM, PrEP awareness was more likely among those with recent receipt of HIV/STI testing. However, those reporting exchange sex were less likely to be aware. These findings suggest PrEP promotion messaging may not be reaching our most vulnerable youth in Baltimore. Demographic characteristics were not
significantly associated with PrEP awareness when adjusting for other risk factors, which suggests targeting PrEP promotion messages based on these characteristics alone may be insufficient.

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6.

CLINIC QUEST: A GAME AND CURRICULUM TO TEACH ADOLESCENTS ABOUT THE PREVENTION AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS

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Purpose: Adolescents and young adults aged 15-24 account for nearly half of all new sexually transmitted infections (STIs). It has been widely accepted that adolescents, particularly Black and Latinx youth, need access to comprehensive and non-stigmatizing information about sexual and reproductive health. We describe the efficacy and feasibility of Clinic Quest, a game and associated curriculum designed to engage youth in lessons around STI treatment and prevention.

Methods: Clinic Quest is a trivia board game designed in collaboration with Chicago-area youth. Players take on the role of physician-researchers and travel around the board to six different STI research labs to collect answers to patient question cards. Players earn points for collecting matching pairs and learning the information on the answer card. A companion curriculum developed by teachers includes a competitive quiz-style game and a public service announcement activity. Teachers delivered the intervention (game and curriculum) in one five-hour period. A pre- and post-test design was used to evaluate the intervention. The primary outcome of interest was knowledge of STIs, as measured by a modified version of the validated Sexually Transmitted Disease Knowledge Questionnaire, a true/false knowledge scale with higher scores indicating more correct answers. At post-test, we assessed game usability, feasibility, and acceptability. Wilcoxon signed-rank sum tests were used to assess improvement in STI knowledge due to the distribution of data.

Results: Forty-four high-school aged youth (median age 15) participated in a five-hour program led by teachers. Participants were predominantly Black or Latinx, cisgender and heterosexual (95%), with 50% of the sample assigned male at birth. Twenty-five percent of participants had previously had sexual intercourse. The game and curriculum had a significant positive effect on STI knowledge (pre-test mean score=6.89; post-test mean score=11.89, p>.00001). Scores on the System Usability Scale placed the game in the “Fair” range for usability (64.4/100), where a score of 68 is average and scores from 51.7-71.0 are considered “fair.” Findings on feasibility and acceptability items suggest high levels of feasibility and acceptability, with 97.4% of youth reporting that they enjoyed playing the game, and the majority of participants rating the game as “good,” “very good,” or “excellent.” Similarly, the majority (89.7%) reported that the game was a good way to learn about STIs and that they would recommend the game to other young people. Additionally, 71.8% liked figuring out the answers to patient questions, and 71.8% of youth would like to use the game in the classroom.
Conclusions: A game and curriculum for promoting knowledge of STIs among adolescents is both effective and feasible. Findings suggest a role for game-based learning in sexuality education. Further, it is feasible for teachers to use board games as a pedagogical resource.

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