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URINE-BASED CHLAMYDIA AND GONORRHEA SCREENING AMONG ASYMPTOMATIC MEN AT A SEXUAL HEALTH CLINIC, 2011–2019

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Centers for Disease Control and Prevention chlamydia and gonorrhea screening recommendations include at least annual screening for sexually active men who have sex with men (MSM) at site of contact and quarterly for MSM at increased risk. There are no specific recommendations for men who have sex with women (MSW). We examined urine chlamydia and gonorrhea screening positivity among asymptomatic men requesting testing at a sexual health clinic in Seattle, WA to assess current clinic screening policies.

We included asymptomatic patients assigned male sex at birth who had no known contact to chlamydia/gonorrhea who received urine-based chlamydia/gonorrhea screening at the Public Health Seattle-King County Sexual Health Clinic (PHSKC SHC) between 2011–2019. We examined urine screening positivity stratified by MSM and MSW and age group (≤ 30 years and > 30 years). Symptoms and gender of sex partners were obtained from clinic medical records. MSW ≤ 30 were stratified into < 25 years and ≥ 25 years.

Between 2011–2019, there were 12,310 clinic visits for urine chlamydia/gonorrhea screening among asymptomatic men with no known contact to chlamydia/gonorrhea, 22% MSM ≤ 30 ($n=2,675$), 30% MSM > 30 ($n=3,752$), 22% MSW ≤ 30 ($n=2,755$), and 25% MSW > 30 ($n=3,128$). MSW ≤ 30 ($n=98$) had the highest chlamydia screening positivity (3.6%, 95%CI 2.9–4.2%), followed by MSM ≤ 30 ($n=63$) 2.6% (95%CI 2.0–3.2%), MSM > 30 ($n=59$) 1.6% (95%CI 1.2–2.0%), and MSW > 30 ($n=46$) 1.5% (95%CI 1.0–1.9%). All groups had $< 1\%$ urine gonorrhea positivity. MSW < 25 and MSW 25–30 had urine chlamydia positivity of 4.7% (95%CI 3.5–5.8%) and 3.1% (95%CI 2.3–4.0%), respectively. Of MSM ≤ 30 with chlamydia/gonorrhea in urine, 66% were positive for the same organism at either the pharynx or rectum. Among MSM > 30 , this proportion was 63%.

Following this analysis, PHSKC SHC changed urine gonorrhea/chlamydia screening recommendations to only recommend asymptomatic MSW < 25 screen once annually. PHSKC SHC recommends against urine-based screening for asymptomatic MSM or MSW ≥ 25 . These findings should prompt a re-evaluation of national screening guidance.

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DISCONTINUATION AND INADEQUATE ADHERENCE TO PRE-EXPOSURE PROPHYLAXIS OF HIV: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Poor persistence and adherence hamper the maximized benefits of oral pre-exposure prophylaxis of HIV (PrEP). This study aimed to understand the rates and reasons for the discontinuation of PrEP among key populations.

Methods A systematic review and meta-analysis were conducted by searching longitudinal studies from three databases from inception to December 18, 2020. Studies were included if they investigated and presented data on discontinuation or inadequate adherence to oral PrEP. Data were extracted and assessed for quality of evidence was rated according to GRADE approach. We did random-effect meta-analysis. This study was registered with PROSPERO (CRD42020155675).

Findings We identified 87 longitudinal studies with 54,313 individuals across 21 countries (30 studies reported stopping, 28 reported inadequate adherences, and 29 reported both). The PrEP discontinuation rate within six months after initiation was 36.0% (95% CI 20.8–51.3%, $I^2=99.7$). Discontinuation rates in six months after PrEP initiation among various populations: gay, bisexual and other men who have sex with men (GBMSM) (31.3%, 95% CI 13.4–49.3%, $I^2=99.7$), heterosexuals and HIV negative partner in serodiscordant couples (32.6%, 95% CI 8.2–72.5%, $I^2=99.0$), clinical and pharmacy records without pre-specified population (62.7%, 95% CI 57.0–68.5%, $I^2=39.6$). Among GBMSM, the provision of two regimens (daily and on-demand) was associated with a lower rate of discontinuation, compared with the provision of a single regimen (daily) (12.3% vs. 31.4%, $P<0.001$). The inadequate adherence in six months after initiation remained around 41.1% (95% CI 29.2–53.0%, $I^2=99.4$) among all populations. Seasonal risk and risk perception, side effects, and concerns for long-term side effects were reasons for discontinuation to PrEP.

Interpretation One-third of PrEP users stopped oral PrEP within half year after initiation, while more than one-third were using it with inadequate adherence, which should be addressed by guidelines in implementation, by PrEP providers before initiation, and by the research of intervention and support.

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PREVALENCE AND ASSOCIATIONS OF CONDOM USE AT LAST SEXUAL ENCOUNTER AMONG ADOLESCENTS OF URBAN AND INDIGENOUS-RURAL REGIONS OF PANAMA

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Background Adolescents of urban (URB) and Comarca Ngäbe-Buglé (CNB) regions of Panama have high prevalence of sexually transmitted infection. This research aims to compare condom use at last sexual encounter (condom use) among URB and CNB adolescents and describe demographic and behavioural associations.

Methods Multicentric, school-based, cross-sectional study using two-stage cluster sampling was conducted among adolescents (14–19y) enrolled in public high schools in URB and CNB. Participants completed a self-administered questionnaire which included sociodemographic and sexual behaviours questions. Condom use associations were found using random-effects logistic regression.

Results A total of 3168 participants (1721 male, 1447 female), median age 17y (IQR:15.9–18.1) were included. Sexual experience was reported by 59.9% of females and 63.8% males ($p=0.02$). Condom use at last sexual encounter was reported by 13.9% of participants. Participants in URB were more