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### Title

Effect of Rectal Hygiene on Sexually Transmitted Infections Among HIV-Negative Men Who Have Sex with Men (MSM)

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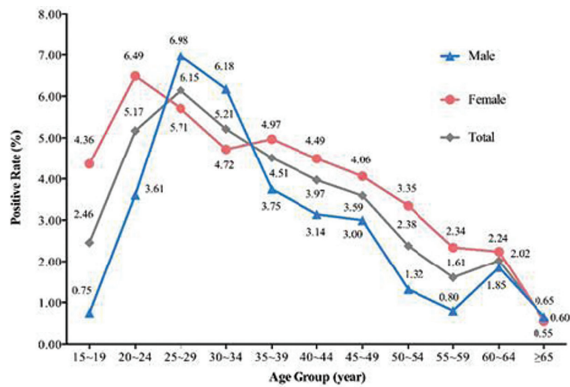


Figure 1. The positive rate of the detection of *Chlamydia trachomatis* by age and gender

**Disclosures.** All authors: No reported disclosures.

### 233. High-Level *Neisseria gonorrhoea* Resistance Detected in a Newly Implemented Surveillance Program in Kampala, Uganda

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Thursday, October 5, 2017: 12:30 PM

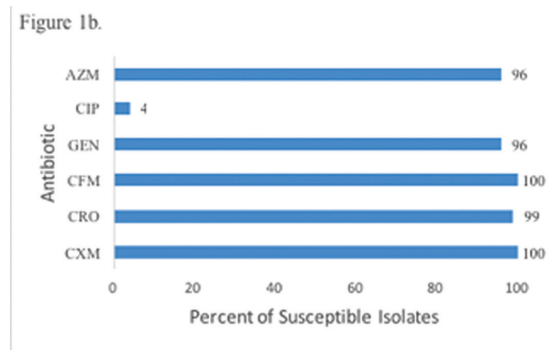
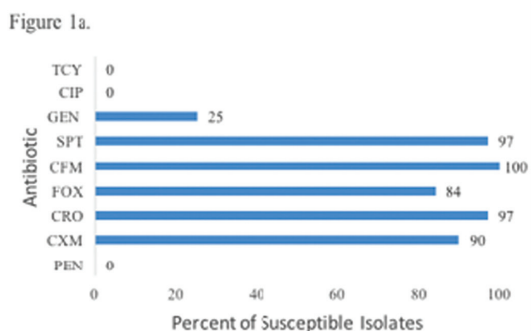
**Background.** *Neisseria gonorrhoea* resistance is a growing problem in Uganda with recent data showing increasing ciprofloxacin resistance up to 100% in this population. The WHO Enhanced Gonococcal Antimicrobial Surveillance Programme (EGASP) was initiated in Uganda in September 2016 to monitor resistance trends.

**Methods.** Urethral swabs were collected from men presenting with urethral discharge to the five sentinel clinic sites from September 2016 to March 2017. Samples were transported to a reference laboratory site. Presumptive identification of *N. gonorrhoea* was based on growth of typical appearing colonies on Thayer-Martin in 5% CO<sub>2</sub>, a positive oxidase test, and observation of Gram-negative, oxidase-positive diplococci in stained smears.

**Results.** 116 samples were received to the reference laboratory site of which 70 (60.3%) had positive growth for *Neisseria gonorrhoea*. Mean age was 28.5 (range 17–60). Fifty-one participants (44%) reported at least one prior episode of gonorrhoea and 42 (36%) reported antibiotic use within the previous 60 days. Of those with completed Etest (bioMérieux, Marcy-l’Étoile, France) resistance profiles, 66 (96%) were ciprofloxacin-resistant or intermediate. One isolate was ceftriaxone-resistant by E-test but susceptible by disk diffusion.

**Conclusion.** Early results from implementation of a gonorrhoea surveillance program in Uganda suggest high levels of resistance to ciprofloxacin (90%) by Etest and penicillin (93%) and tetracyclines (100%) by disk diffusion. Prior studies of gonococcal resistance in Uganda have noted increasing levels of resistance, particularly to ciprofloxacin which until 2010 was the recommended first-line empiric therapy for gonococcal infection in Uganda. Of note, discrepancies were occasionally noted between disk diffusion and Etest results, which requires further investigation. Ongoing surveillance efforts will be crucial to shape clinical guidelines and national policy.

Figure 1. (a) *Neisseria gonorrhoea* antibiotic susceptibility profile by Kirby-Bauer disk diffusion. (b) *Neisseria gonorrhoea* antibiotic susceptibility profile by Etest. \*PEN = penicillin, CXM = cefuroxime, CRO = ceftriaxone, FOX = cefoxitin, CFM = cefixime, SPT = spectinomycin, GEN = gentamicin, CIP = ciprofloxacin, TCY = tetracycline, AZM = azithromycin.



**Disclosures.** All authors: No reported disclosures.

### 234. Effect of Rectal Hygiene on Sexually Transmitted Infections Among HIV-Negative Men Who Have Sex with Men (MSM)

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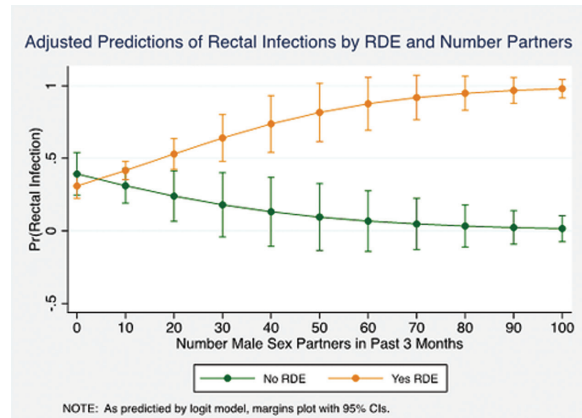
**Background.** Rectal gonorrhoea (NG) and chlamydia (Connecticut) infections are common among men who have sex with men (MSM). Rectal douching/enema (RDE) is a common practice among MSM that can affect the rectal microbiome. It is unclear if this practice is associated with acquiring rectal infections (RI) with either NG or CT.

**Methods.** From 2013–2015, 398 adult HIV-negative MSM and transwomen were enrolled in a randomized controlled study on text messaging for adherence to pre-exposure prophylaxis (PrEP). Participants were surveyed on sexual behavior, frequency of RDE, drug use, and nutritional habits in conjunction with routine sexually transmitted infection testing. Pearson’s  $\chi^2$  and two sample *t*-tests were used to measure significance of RDE and other risk factors with RI. Multivariable logistic regression model was used to control for confounding and assess the association of RDE with RIs. Confounders (i.e., age, number anal receptive sex, number sex partners) were selected a priori for inclusion in the final model based on a causal model and statistical significance.

**Results.** Of 397 participants, 262 (67%) performed RDE and 132 (33%) had at least one NG or CT rectal infection over 48 weeks. Number of condomless anal receptive sex acts (mean = 19,  $P < 0.001$ ), condom use for anal receptive sex ( $P = 0.017$ ), number of male sex partners in past 3 months (mean = 14,  $P = 0.001$ ), and the use of poppers ( $P < 0.001$ ) were associated with RI. There was no significant association between nutritional habits, probiotic foods or supplements and RI, with the exception of energy bars ( $P = 0.029$ ). Controlling for confounders, RI was associated with RDE less than weekly with OR = 1.02 (95% CI 0.52–1.99) while RDE weekly or more had OR = 2.08 (95% CI 1.03–4.17). Stratified by number of partners, MSMs with more than the median (>6) number of partners had OR = 4.96 (95% CI 1.29–19.03) if performing RDE less than weekly, and OR = 6.03 (95% CI 1.55–23.49) if weekly or more.

**Conclusion.** Rectal hygiene with douching/enemas is a common practice among MSMs on PrEP, which increases the odds of acquiring rectal NG and/or CT. This finding is suggestive for the use of rectal hygiene products/practices as potential targets for sexually transmitted infection prevention.

Figure 1



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