

approach to sexual health that encompassed multiple, complementary strategies for managing sexual health. Participants characterised this conceptual model as the 'ideal', acknowledging that in reality and within each domain this vision is not always realised. For example, participants described stigmatising reactions to partner notification and condom use (or non-use). Physicians, on the other hand, reflected on the real-life limitations of providing individualised patient care, particularly the strain frequent testing and treatment places on resource-limited health settings. Finally, many participants felt that some strategies (notably HIV pre-exposure prophylaxis) were disproportionately valued by individuals and health organisations, undermining a holistic approach by focusing on one dominant strategy.

**Conclusion** The conceptual model defined by this research provides a framework for future efforts to promote sexual health while acknowledging enduring challenges to normalised, individualised and holistic approaches. Gay and bisexual men and sexual health physicians value a multifaceted and choice-driven approach to sexual health, reinforcing the need for a menu of prevention options that reflect the realities of STI transmission balanced against the resources required to deliver sexual health care.

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#### P547 RELATIONSHIP LENGTH OF GAY MALE COUPLES AND SEXUALLY TRANSMITTED INFECTIONS

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**Background** Bacterial sexually transmitted infections (STIs) are preventable, treatable, and have been increasing among men who have sex with men due to limited STIs/HIV screening and high-risk sexual behaviors, including partner concurrency and condomless anal sex. Within stable relationships, sexual behavior patterns may change over time. This analysis was conducted to estimate if relationship length is associated with STIs prevalence among gay men couples.

**Methods** Gay men who reported having a primary relationship answered a survey and were tested for bacterial STIs (syphilis, chlamydia or gonorrhoea) during 2015 in Lima, Peru. Among couples, discordant STI status (only one partner had an STI) and concordant status (both partners had the STI) were compared by STI. Generalized linear models, controlling for correlation between couple members, were used to estimate adjusted prevalence ratios (aPRs).

**Results** Overall, 254 individuals were included (98 couples and 58 one partner only). Median age was 26 years (IQR: 22–30), 62 individuals (24.4%) reported sex outside their relationship and 76 (29.9%) were diagnosed with at least one bacterial STI. Regarding relationship length, 86 (33.9%) had been in their current relationship <6 months, 86 (33.9%) between 6–18 months, and 78 (30.7%) for 18+ months. Among the 98 couples, more couples had discordant STI status than concordant status for syphilis (12.8% vs 4.3%,

$p=0.001$ ), chlamydia (25.0% vs 7.6%,  $p<0.001$ ) and gonorrhoea (20.7% vs 2.2%,  $p<0.001$ ). Having a relationship for 18 + months was negatively associated with STI prevalence (aPR: 0.55, 95% CI: 0.30–0.98) after adjusting for age, HIV status, use of condom, and anal intercourse outside primary relationship.

**Conclusion** Our data suggest STIs prevalence is lower among gay men in longer term relationships. Future studies on gay male couples should consider the effect of relationship length on sexual behavior patterns to implement interventions for reducing STIs occurrence based on findings in a gay couple context.

**Disclosure** No significant relationships.

#### P548 ACUTE GASTROENTERITIS IN MEN-WHO-HAVE-SEX-WITH-MEN IN SEATTLE, WASHINGTON, 2017–2018

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**Background** Men-who-have-sex-with-men (MSM) are at increased risk for infection with enteric pathogens such as *Shigella* through sexual transmission. The etiology of acute gastroenteritis in this population has not been examined since the advent of molecular diagnostics. This study describes the causes of acute gastroenteritis in MSM in Seattle, Washington.

**Methods** Clinical and laboratory data were obtained for 226 MSM individuals seen in University of Washington-affiliated hospitals and clinics who underwent multiplex stool PCR testing (FilmArray GI Panel, BioFire Diagnostics, Salt Lake City, UT) from January 1, 2017 to June 1, 2018. Student's t-test and chi-square were used to determine significant differences between HIV-positive and HIV-negative men.

**Results** Of 226 individuals tested, 130 (57.5%) had at least one positive stool test. Of individuals with a positive test result, 70% were HIV-positive. Sixty-one percent of HIV-negative patients were using PrEP. Of the positive samples, 88.7% detected a bacterial etiology, 26% detected a virus, and 40% a protozoal pathogen. *Shigella*, *Campylobacter* and diarrheagenic *E. coli* were the most commonly-detected bacteria (30.5%, 17.2% and 33.1% of positive samples, respectively), while norovirus was the most commonly-detected virus (15.2%), and *Giardia* was the most common parasite (20.5%). The etiologies of gastroenteritis were similar between HIV-positive and HIV-negative men. Cultured *Shigella* and *Campylobacter* isolates were frequently resistant to multiple antibiotics.

**Conclusion** MSM present with acute gastroenteritis caused by a range of pathogens, including some not detected by conventional stool culture, as well as sexually-transmitted pathogens such as *Shigella*, *Campylobacter* and *Giardia*. PrEP may be a risk factor for sexually-transmitted enteric infections as well as other STIs due to risk compensation. High levels of resistance to antibiotics used to treat gastroenteritis is consistent with a high rate of antibiotic exposure in this population and/or transmission of multi-resistant strains. New approaches may be needed to detect, treat and prevent enteric infections in MSM.

**Disclosure** No significant relationships.