

types jointly influence individuals' STI risk reduction strategies.

**Methods** We analyzed data from 2011–2017 National Survey of Family Growth for 5,948 and 5,433 unmarried, non-cohabiting sexually active women and men aged 15–44. To describe sexual network position, we created four dichotomous variables that included both past-year number of opposite-sex sex partners (one, multiple) and perceived partner non-monogamy (PPNM, yes/no). Relationship type was defined as a steady or casual sex partner at last sex. Prevalence ratios were used to assess the relationship between network position and two past-year outcomes: condom use at last sex and STI testing. Results were stratified by relationship type.

**Results** 54% and 47% of women and men aged 15–44 had one partner with no PPNM. 6% and 4% had one partner with PPNM, 22% and 29% had multiple partners with no PPNM and 17% and 20% had multiple partners with PPNM. Men with multiple partners and PPNM had the lowest prevalence of condom use of all four groups (37.7%, CI: 33.5, 44.1 compared with 52–56%). Moreover, women and men in this group with a steady sex partner had higher prevalence of past-year STI testing if they reported PPNM than if they did not (women: aPR=1.31; CI: 1.11, 1.55, men: aPR=1.47; CI: 1.19, 1.81). This same relationship was not seen for women and men whose last sex was with a casual partner.

**Conclusion** Individuals' STI risk reduction strategies depend on sexual network position and relationship type. Those with PPNM and a steady sex partner may seek STI testing more frequently. Proxy sexual network measures from national surveys may help target STI prevention and testing interventions.

**Disclosure** No significant relationships.

#### P249 WHAT WORKS IN PARTNER NOTIFICATION FOR SEXUALLY TRANSMITTED INFECTIONS, INCLUDING HIV? SYSTEMATIC REVIEW AND META-ANALYSIS

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**Background** Partner notification (PN) is a core component of the management of sexually transmitted infections (STI). A range of methods can help to find, test and treat sexual partners of an infected person (index patient). The objective of this review was to assess the effects of different PN strategies in people with STI, including HIV infection.

**Methods** We conducted this review for the Cochrane STI Review Group. We searched for randomised controlled trials (RCTs) in Cochrane, MEDLINE and EMBASE databases, reference lists and trial registries up to 18 October 2018. Two independent reviewers conducted screening, selection and data extraction. Primary biological outcomes were: repeated infection in index cases with curable STI and new infections in partners of people with HIV. We conducted meta-analysis where appropriate.

**Results** We included 37 trials from 14 countries in Asia, Australia, Europe, South America, sub-Saharan Africa and USA in patients with bacterial STIs or trichomonas (n=26 trials), STI syndromes (n=5), HIV (n=5), mixed STI (n=1). The 37 trials

assessed 56 comparisons between PN strategies, with the most common being enhanced patient referral (n=22) and expedited partner therapy (EPT, n=18) for curable STI and contract referral for HIV (n=3). For index cases with chlamydia, gonorrhoea or trichomonas as a combined outcome, EPT reduced repeat infection compared with simple patient referral (n=6,390, relative risk 0.71, 95% confidence interval, CI 0.59–0.86, I-squared 0%) but not compared with enhanced patient referral (n=1,220, relative risk 0.96, 95% CI 0.6–1.53, I-squared 33%). For HIV, contract referral, versus simple patient referral, increased the number of partners found infected (n=1,884, mean difference 0.15, 95% CI 0.06–0.24, I-squared 0%).

**Conclusion** EPT is better than simple patient referral, but not better than enhanced patient referral for curable STI. Many PN strategies have limited evidence. Future trials should strengthen evidence of effectiveness by evaluating existing PN strategies using biological outcomes.

**Disclosure** No significant relationships.

#### P250 INTERIM ANALYSIS OF INDIVIDUAL RISK FACTORS, SEXUAL NETWORKS, AND STI RISK IN A MILITARY POPULATION

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**Background** Sexually transmitted infections (STIs) are a consistent medical concern among military service members, who may experience select rates well above their civilian counterparts. Differences in individual risk behaviors as well as network risk factors are different in military populations which may explain the increased rates of select STIs. We performed a pilot study to validate a STI risk assessment survey tool for future use in the military population.

**Methods** Naval Medical Center Portsmouth was used to pilot a survey for a larger, egocentric social, and sexual network study in military populations. Study participants (n=50) completed an anonymized computer-assisted survey focusing on STI risk factors, including a sexual partner inventory. We evaluated individual demographics, behavioral risk factors, and sexual partnership formation to include mixing patterns and concurrency. Recent history of STI was self-reported in the survey and validated with the participant's medical record. Fischer's exact test was used if applicable. For partners, data was weighted and Wald Chi-square test was used to assess association between variables.

**Results** Completion of the survey and sexual inventory by respondents was common. The majority were active duty, enlisted, and male. The survey suggested evidence of concurrency and disassortive mixing by age, race, and active duty status. Respondent (p=0.0089) and sexual partner (p=0.0401) alcohol consumption before sex was common and associated with history of STI. Condom use was inconsistent and less frequent with main/steady partners when compared to casual and anonymous partners.

**Conclusion** The high completion rate demonstrated in this pilot study support that a military population will complete a detailed STI risk index including sexual partner inventory. Interim data analysis suggests that common individual risk