COVID-19 related restrictions have impacted the dynamics of romantic relationships, with many cohabiting partners spending more time together and non-cohabiting partners much less. We explored qualitatively, the vulnerabilities (characteristics that decreased resilience) and stressors that impacted intimate relationships following the initial COVID-19 lockdown.

45 semi-structured interviews were undertaken with participants who had completed a national web-panel survey (Natsal-COVID) and agreed to follow-up. Here we draw on the accounts of 19 participants in steady relationships who reported relationship difficulties. Analysis drew on Karney and Bradbury’s ‘Vulnerability-stress-adaptation’ model.

The sample comprised 12 women and 7 men, 13 were living with their partner and 6 were not. Participant’s pre-existing attachment, coping, and communication styles shaped their susceptibility to relationship difficulties. The stress of COVID-19, amplified by financial strain and health issues, affected couple’s ability to adapt. In live-in relationships, childcare, divisions of housework, and a lack of space in which to unwind and escape from negative behaviours intensified pressures on relationship quality. One participant described these in the context of a violent relationship that worsened during lockdown, which she had managed to leave. Participants who did not live with their partners described struggling with phone/digital communication, physical distance, and a lack of certainty in the future of their relationship. In adapting to ‘pandemic life’, tensions arose over how much time to spend together. Those in non-cohabiting relationships were torn between balancing risks of COVID-19 against those of not seeing each other, with many reporting feeling they had placed their relationship on hold. For some, their sex life improved their adaptation, while for others it was a further source of stress.

Understanding how existing vulnerabilities interact with a stressful event to shape adaptive processes in couples’ relationships might provide insights for counsellors and healthcare providers to better support couples through COVID-19.

Military service provides unique opportunities for sexual partnerships development. Changes in social networks, geographic relocation, and other bridging opportunities may contribute to the high burden of sexually transmitted infections (STI) in the military. Here we present a statistical analysis of sexual partnerships in a sample of military beneficiaries at five military treatment facilities.

A sample of 821 military beneficiaries completed a computer-assisted self-interview (CASI) cross-sectional egocentric survey of sexual history and individual STI risk factors and a detailed 90-day sexual partner inventory. Additional demographical and clinical data were captured from the electronic medical record. Weighted logistic regression was used to assess the association between risk factors and laboratory-confirmed STI.

669 of 821 (81.49%) subjects submitted at least one partnership survey, yielding data on 1,416 sexual partnerships. Partnerships per respondent ranged from 0 – 24. Condom or dental dam usage by partnership type (MSM, MSW, WSM, WSW) ranged from 5 – 32% at last sex act, and was associated with partnership status (main/’steady’ versus casual/anonymous).
(p<0.001). Partnership mixing on age group, race/ethnicity, and military status each showed statistically significant difference by partnership type (MSM, MSW, WSM, WSW) (p<0.001). Recent STI was not associated with disassortative mixing on age group or military status but was associated with disassortative mixing on race/ethnicity (p=0.003). 194 of 669 (29.0%) subjects reported concurrent partnerships or suspected sexual concurrency by their partner(s). Suspected sexual concurrency by respondents’ partner(s) significantly increased the odds of STI in the respondent after adjusting for partnership type (p=0.02).

Military service includes unique social and cultural constructs that may influence sexual partnership formation. While not likely representative of the U.S. military as a whole, these results attempt to identify partnership characteristics and risk factors that may support the maintenance of high rates of select STIs among military populations.

Conclusions AMR in N. gonorrhoeae in Sweden remains low, in particular to ceftriaxone and azithromycin that is recommended internationally for dual therapy. The incidence increases in Sweden appear to be driven by increased spread among men-who-have-sex-with-men but also younger heterosexuals of both genders. This is the first national genome-based epidemiological study for N. gonorrhoeae in Sweden and final genomic results are pending.

Background The number of reported cases of gonorrhoea in Sweden continuously increased from an incidence of 7.8 per 100 000 inhabitants in 2009 to 31.4 in 2019. The largest increase in incidence was observed during 2016–2017. No national molecular epidemiological study investigating the population of N. gonorrhoeae circulating in Sweden has been performed in the last two decades. Our aim was to examine the antimicrobial resistance (AMR) and genome-based epidemiology, in conjunction to patient epidemiological data, of all gonococcal isolates (n=1279; one isolate per case) from gonorrhoea cases in Sweden during 2016.

Methods AMR testing was performed using Etest, and MICs were interpreted using current clinical resistance breakpoints from EUCAST. All isolates were whole genome sequenced using Illumina HiSeq X platform. Patient epidemiological data was obtained from the Public Health Agency of Sweden.

Results The gonorrhoea patients consisted of 252 (19.7%) women and 1027 men (80.3%). The medium age of the women was 27.4 years and of the men 32.1 years. Regarding sexual orientation, 619 (48.4%) reported homosexual, 605 (47.3%) heterosexual, 31 (2.4%) bisexual, and 24 (1.9%) did not report. Most prevalent countries of infection were Sweden (n=875, 68.4%), followed by Thailand (n=70, 5.5%) and Germany (n=32, 2.5%).

Overall, the phenotypic AMR was as follows: ceftriaxone and spectinomycin (0%), cefixime (1.7%), azithromycin (1.3%) and ciprofloxacin (51.1%). A high concordance between phenotypic AMR and molecular AMR determinants was found. Results from the genome-based epidemiology are currently in final analysis.

Background The Pacific Islands have a low HIV prevalence, but high rates of STI's and large high-risk populations. The UNDP Programme supports 11 Pacific Island Countries (PICs). In-country clinical training is provided as well as HIV/STI diagnostics, treatments, and specialist HIV clinical advice. In 2020, in-country support was not possible because of the COVID19 pandemic.

Approach After discussion with UNDP partners and PICs HIV/STI-healthcare workers, we presented the following online education:

- Monthly webinars. Eight one-hour webinars on Zoom, each repeated 4 hours later as the PICs span 7 time-zones. These case-based educational webinars covered HIV/STI clinical care related topics. Guest speakers were invited for specialist topics.

- In-country HIV/STI-online education workshops run over one-day for nine PICs and over half-day for Niue and Tuvalu, the two smallest PICs. The workshops ran in late 2020 to build on the webinar knowledge and were tailored to in-country needs. Training was mainly case based, co-facilitated by a worker from the Fijian HIV-positive peoples NGO, FJN+, with guest speakers invited for specialist topics.

Outcomes

- Monthly webinars: 323 individual attendances for the 8 webinars. 114 evaluations were returned; 95% found the HIV webinars very helpful and 92% would recommend them to other clinical staff. As poor internet was a problem, the presentation slides and the recorded webinars were sent to the PIC attendees.

- In-country online HIV/STI-education workshops: 241 participants across the PICs. A planning meeting was conducted with each PIC. The average scores in questionnaires pre- and post-training doubled from 40% to 80%. Participants found the case-based training useful and requested follow-up training.

Innovation/Significance This is first time in the HIV/STI clinical support to the Pacific has been provided on-line and despite internet challenges, it is an economical and efficient way to provide ongoing HIV/STI clinical education in this remote setting.