P227 PERCEIVED STRESS AND SOCIOECONOMIC FACTORS ASSOCIATED WITH VAGINAL MICROBIOTA IN THE LONGITUDINAL STUDY OF VAGINAL FLORA

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Background *Lactobacillus*-dominated vaginal microbiota can confer protection against STIs and high levels of stress and lower socioeconomic status are associated with increased risk for STIs. We examined whether perceived stress and demographic factors are associated with vaginal microbiota.

Methods A subsample of women (n=1,595) enrolled in the Longitudinal Study of Vaginal Flora (LSVF) were utilized in this study. Vaginal microbiota was characterized by amplicon sequencing of the V3-V4 hypervariable regions of the 16S rRNA gene and clustered into community state types (CSTs). Stress in the past 30 days was measured using the Perceived Stress Scale and was categorized into quartiles. We used mixed-effects multinomial regression models accounting for within-subject associations to compare prevalence of *Lactobacillus iners*-dominated (CST III) and low-*Lactobacillus* (CST IV) versus a category of high relative abundance of other *Lactobacillus* spp. (CST I, II, V) across stress quartiles and demographics including education, income, race, marital status, and age.

Results In unadjusted models, the third stress quartile (reference first quartile) was associated with greater prevalence of CST III (prevalence ratio (PR=1.15, p=0.013) and IV (PR=1.22, p=0.048). The top quartile of stress was not statistically significant. After adjusting for covariates, results were attenuated. An education below high school level (reference high school or more) was associated with higher prevalence of CST III (PR=1.30, p=0.002) and IV (PR=1.35, p=0.002). Lower prevalence of CST IV was observed among participants who were White (reference Black, PR=0.38, p<0.001), and had >$3000 monthly income (reference <$500, PR=0.80, p=0.47).

Conclusion In bivariate analysis, moderate stress levels were associated with less optimal vaginal microbiota, exemplified by low abundance of *Lactobacillus* and *L. iners*-dominated microbiota. Adjustment for education and income attenuated these findings. Future studies are needed to clarify how education and income associated with vaginal microbiota, whether through access to care, sexual networks or stress affecting the body's immune response.

Disclosure No significant relationships.

P228 FROM 2017 POSITIVE VOICES DATA: IS SELF-REPORTED HEALTH ASSOCIATED WITH DEPRESSIVE SYMPTOMS AMONG PEOPLE WITH HIV IN ENGLAND?

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Background The study aims to determine whether self-reported health is associated with depressive symptoms among people with HIV.

Methods The study used cross-sectional, nationally representative survey data from people with HIV from the Positive Voices survey in 2017. Multivariable logistic regression determined associations between self-reported health and depression (defined by GHQ-12 score≥4), adjusted for age, employment, financial security (ability to meet basic needs), lifestyle (smoking and binge drinking), self-reported pain and comorbidities.

Results Of 2,142 MSM, 1,015 women and 583 heterosexual men, the proportion reporting good or very good health was 70%, 77% and 77% respectively. Prevalence of depression increased as self-reported health worsened: among MSM, 10% reporting 'very good' health had depressive symptoms, this rose to 24% among those reporting 'good' health, 57% (fair health) and 87% (bad health). Equivalent figures were 8%, 17%, 45%, 85% for heterosexual men; and 9%, 23%, 59%, 78% for women. After adjusting for other factors, the likelihood of depression increased with bad health compared to very good health among MSM (AOR 28.42, CI 14.44–55.91, p<0.0001); heterosexual men (AOR 20.15, CI 4.79–84.79, p<0.0001) and women (AOR 11.46, CI 3.76–34.94, p<0.0001). Compared to financially secure MSM, heterosexual men and women, their financially insecure counterparts were significantly more depressed: (AOR 5.02, CI 2.96–8.53, p<0.0001); (AOR 5.27, CI 2.12–13.14, p=0.001); (AOR 3.23, CI 1.79–5.83, p<0.0001). Strong association between self-reported pain and depression was observed among MSM (AOR 1.41, CI 1.07–1.84, p=0.014); heterosexual men (AOR 2.77, CI 1.42–5.42, p=0.003) and women (AOR 3.79, CI 2.38–6.05, p<0.0001). Unemployment was strongly associated with depression among MSM (AOR 1.87, CI 1.13–3.11, p=0.022), but not heterosexual men (p=0.651) or women (p=0.288).

Conclusion Self-reported health is an important predictor of depressive symptoms in people with HIV, along with financial security and pain. This data can be used to inform screening tools for depression among people with HIV.

Disclosure No significant relationships.

P233 GENITAL TRACT INFECTION OF WOMEN WITH AND WITHOUT TUBAL PATHOLOGY

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Background The aim of our study was to investigate the presence of *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (NG), *Mycoplasma genitalium* (MG) and non-sexual transmitted infection (STI) microorganisms in Fallopian tubes of patients with tubo-peritoneal factor of infertility diagnosed during laparoscopy or with normal tubes.

Methods 12 of 22 infertile women included in investigation had tubal-peritoneal pathology and 10 women were without tubal pathology as assessed by laparoscopy. During laparoscopy the tubes were flushed with 2–4 ml 0.9%-saline solution, immediately after the laparoscope and auxiliary instruments were introduced. The tubes were flushed by gently grasping the tubal ampulla near the fimbria portion with atraumatic tubal forceps and introducing an epidural catheter inside the ampulla through the abdominal tubal ostium via a suprapubic