old; 60% female) in Durban and Soweto (2014–2016). Survey data captured social and clinical determinants of health (e.g., gender, income, food insecurity, body mass index [BMI]) and psycho-social characteristics (depression, anxiety, stress, substance use). A random, gender-stratified subset of 39 HIV-negative participants was selected. Luminex® assays were used to analyze 12 plasma biomarkers. Associations between biomarkers and social, clinical, and psycho-social factors were assessed using Spearman's rank correlation.

Results Median age was 18 (IQR: 17–20); 19/39 were female. Consistent with prior studies, high depression symptomology scores were associated with elevated pro-inflammatory (IFN- α 2, IL-1 α , IL-6, IL-12(p40), MIP-1 β) and anti-inflammatory (IL-4, IL-10) cytokines (all $p < 0.05$). Low BMI correlated with elevated pro-inflammatory (IFN- α 2, IFN- γ , IL-1 α , IL-1 β , IL-6, IL-12(p70), IP-10 and TNF- α) and anti-inflammatory (IL-10) biomarker levels (all $p < 0.05$). Associations were also observed between some biomarkers and indicators of anxiety, food insecurity, low income, and financial responsibility for dependents, which varied between sites.

Conclusion Results indicate that psycho-social, clinical, and socio-economic challenges are associated with inflammatory biomarker levels in South African youth. This suggests a link between social determinants of health and biological factors that modulate disease risk, possibly including inflammatory conditions associated with increased HIV transmission. Further analysis is required to confirm these results and investigate their implications for HIV prevention.

Disclosure No significant relationships.

P413

A DYADIC INTERVENTION FOR STI PREVENTION IN YOUTH: FEASIBILITY, ACCEPTABILITY & PRELIMINARY EFFECTIVENESS

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Background Sexually transmitted infection (STI) prevention strategies for adolescents and young adults (AYA) primarily rely on individual approaches leaving sexual partners with significant unmet sexual and reproductive health needs. This paper describes the research methods and preliminary feasibility, acceptability, and preliminary effectiveness of a dyad-based behavioral intervention that augments individual evidence-based interventions with joint health education counseling for STI-affected AYA dyads within a primary care setting.

Methods Index participants were AYA 15–25 years, engaged in heterosexual intercourse, history of positive STI, Baltimore City resident, willing to recruit their main sexual partner for the study. Exclusions include: one or both partners has HIV infection, pending incarceration, greater than five years age difference, evidence of partner violence. Index and partner completed a single individual session separately with a gender-matched health educator. Dyads were randomized to receive an additional joint debriefing session together, and separately completed a telephone interview 6 weeks post intervention.

Results 18 dyads were recruited over 11 months. Mean age [range] females: 21.5 [17–26], males: 22.7 [18–27]. Mean age difference within dyads: 1.4 years. Acceptability was high with 100% agree/strongly agree it was a great opportunity to reflect on relationship with their partner and a worthwhile use of their time. More in the intervention group endorsed feeling closer to their partner than when they arrived for the visit (94 vs 88%). 100% of dyads were still together at 6 weeks. Participants reported high confidence that they could negotiate condom use with their partner even if partner did not want to, mean 9.3 (sd =2.2) out of 10.

Conclusion AYA endorsed helpfulness of the intervention. Participants showed high confidence in condom negotiation with their partner 6 weeks following the intervention. Recruitment of AYA dyads is a challenge, and more successful with young adults; however, dyadic interventions show promising impact on behavior that can prevent STI.

Disclosure No significant relationships.

P415

THE DECISION-MAKING PROCESS OF SELF-INITIATED HIV TESTING AMONG YOUTH: A QUALITATIVE STUDY

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Background In the United States, youth have the lowest rates of HIV testing in comparison to the general population. Only 33% of youth aged 18 to 24 years have ever been tested for HIV infection, and approximately 51% of HIV-infected youth are unaware of their HIV serostatus. Low rates of HIV testing drive transmission, late diagnoses, and poor health outcomes including difficulty achieving viral suppression and death. Self-initiated testing (i.e., testing without the immediate recommendation of a clinician) has been identified as a strategy that can improve testing rates in this population. However, little is known about how youth self-initiate HIV testing or strategies that can enhance its uptake. Therefore, the purpose of this study was to describe the decision-making process of youth who self-initiated HIV testing.

Methods A qualitative study was conducted with 30 youth aged 18 to 24 years who self-initiated HIV testing, recruited directly from multiple HIV testing sites in South Florida. Data was collected using a demographic and sexual history questionnaire and audio-recorded individual in-depth interviews. Data analysis occurred using interpretative phenomenological analysis, allowing the rigorous exploration of participant's experiences and perspectives.

Results The findings from this study describe how youth acknowledge their vulnerability to HIV infection and navigate the process of deciding and self-initiating testing. Some supporting themes that further explain this finding include *Self-convincing, Conversation Prompts, The Right Place and Right Time, and Finding HIV testing sites*.

Conclusion Despite current clinical guidelines recommending routine HIV testing, there are still challenges in HIV testing among youth. Findings from this study are pivotal for subsequent studies that seek to further understand self-initiated HIV testing among youth and design targeted interventions that will improve testing uptake. Additionally, this study will reveal areas for recommendations that will