

better sexual health outcomes. There is a need for strategies to raise uptake of such edu-dramas, and to evaluate whether wider coverage leads to population impact.

Disclosure No significant relationships.

P410 PROGRAM EVALUATION TO PROVIDE HIV AND STI INFORMATION IN JUNIOR HIGH SCHOOLS IN KPANDO, GHANA

¹Danielle Vos, ¹Kafui Bavor, ¹Edem Richard Adjoror*, ²Laura Koster. ¹HardtHaven Children's Home, Kpando, Ghana; ²UNITED Projects, Kpando, Netherlands

10.1136/sextrans-2019-sti.497

Background We are a group of young people, aged 15 to 23 in Junior and Senior High School who are living with HIV. We are starting the conversation in our community to educate youth about HIV and STI. We do this together with our sister organization UNiTED. UNiTED conducts regular health education about HIV and STI in 13 schools. As 'The STARS' we conduct activities on World AIDS Days (WAD) in 19 schools. To evaluate the impact of our activities a program evaluation took place in June 2018.

Methods The program evaluation was a survey to assess students' knowledge about health behaviors. This survey was conducted in 4 schools that did not have the UNiTED health lessons and 3 schools that did have UNiTED health lesson and were also part of the WAD activities. The tool used was a modified version of validated Knowledge Attitude Practices (KAP) survey.

Results 382 JHS students participated in this study, aged between 10 and 24 years old, with a mean age of 14.6 years old. 195 attended form 1 and 185 attended form 2. On safe sex, STIs and teenage pregnancy, the intervention group scored 1.5% higher in comparison with the control group. The intervention group scored 0.4% lower on the topic HIV/AIDS than the control group. Both results were not significant.

Conclusion While the results from the process evaluation of STI education show that the 2017 activities did not have the desired effect of increasing knowledge about STIs in the students which took part in the WAD activities in 2017 we are using the findings of the study to better integrate UNiTED's in school education with the WAD to create synergies for learning which we hope will increase the effectiveness of the two activities. We will conduct another evaluation of knowledge secondary school student's in 2019.

Disclosure No significant relationships.

P411 ACCEPTABILITY OF A PHONE APP-BASED MOTIVATIONAL INTERVIEWING INTERVENTION FOR YOUNG MEN'S SEXUAL HEALTH

Alexis Guzman*, Sara Landers, Meredith Nechitilo, Marina Catallozzi, Melanie Gold, David Bell, Susan Rosenthal. Columbia University Irving Medical Center, Pediatrics, New York, USA

10.1136/sextrans-2019-sti.498

Background Motivational interviewing (MI) is an effective communication style for facilitating behavior change. Pairing MI with a smartphone app has the potential to engage young men, a traditionally hard-to-reach population. We assessed young men's experiences in a pilot study examining the use

of a smartphone app with phone-based MI coaching by trained community health coaches (one female, one male).

Methods Fourteen (of 26) predominantly black and Hispanic men, ages 16–19 years, who participated in the pilot study were interviewed about their experience. They participated in app activities and coaching that addressed sexual health or fitness (comparison group). Interviews were transcribed and coded using thematic analysis.

Results Participants found the app activities and coaching to be acceptable. In both arms, the young men were asked about sexual health and reported being comfortable discussing it in this format. In the sexual health arm, they reported gaining knowledge about contraceptive methods and sexually transmitted infections, which some shared with their sexual partners. Participants were comfortable with the coach's gender; a benefit of a female coach was her perspective on sexual health. Most preferred phone rather than in-person or video coaching sessions due to not having to travel, ease of rescheduling sessions, and increased privacy regarding sensitive subjects. The most common obstacle to participation was phone replacement; others included parental monitoring and restriction of phone privileges. Over time, the young men felt positively about their connection to the coach. They sometimes viewed the coach as having medical expertise beyond the scope of his/her training.

Conclusion Phone app-based MI with community health coaches has great potential for use with young men for a variety of health issues including sexual health; however, it has unique obstacles. Phone accessibility may restrict young men's ability to fully engage and perceptions of a coach's expertise should be regularly clarified.

Disclosure No significant relationships.

P412 AN EXPLORATORY ANALYSIS OF ASSOCIATIONS BETWEEN PSYCHO-SOCIAL FACTORS AND SYSTEMIC INFLAMMATION AMONG SOUTH AFRICAN YOUTH

¹Ashley Henry*, ²Daniel Muema, ²Ngomu Akilimali, ³Fatima Laher, ⁴Manjeetha Jaggernath, ⁵Stefanie Hornschuh, ¹Patricia Smith, ¹Laura Cotton, ⁴Mags Bekinska, ⁶Jenni Smit, ³Janan Dietrich, ³Glenda Gray, ⁷Mark Brockman, ¹Angela Kaida, ⁸Thumbi Ndung'u. ¹Simon Fraser University, Faculty of Health Sciences, Burnaby, Canada; ²Africa Health Research Institute, HIV Pathogenesis Programme, Durban, South Africa; ³Perinatal HIV Research Unit (PHRU), Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa; ⁴University of the Witwatersrand, Maternal Adolescent and Child Health Research Unit, Durban, South Africa; ⁵University of the Witwatersrand, Faculty of Health Sciences-perinatal HIV Research Unit (PHRU), Johannesburg, South Africa; ⁶MatCH Research Unit (MRU), Department of Gynecology and Obstetrics, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa; ⁷Simon Fraser University, Faculty of Health Sciences, Burnaby, Canada; ⁸University of the KwaZulu Natal, HIV Pathogenesis Programme and Africa Health Research Institute, Durban, South Africa

10.1136/sextrans-2019-sti.499

Background Psycho-social factors affect biological processes, including inflammation and immune response, yet their contribution to gender and socio-economic disparity of HIV is not well understood. In South Africa, 38% of new HIV infections occur in 15–24 year olds, with 3-times higher incidence among females. In this exploratory study, we examined associations between psycho-social factors and biomarkers of inflammation that may be linked to HIV acquisition in South African youth.

Methods Baseline plasma and linked cross-sectional survey data were obtained from the AYAZAZI study, which enrolled 425 HIV uninfected or HIV status-unknown youth (16–24 years

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

¹Pamela Matson*, ¹Julia Rowell, ¹Jacquelin Toppins, ¹Colin Woods, ¹Steven Huettner, ¹Camille Robinson, ¹Errol Fields, ¹Arik Marcell, ²Maria Trent. ¹Johns Hopkins School of Medicine, Pediatrics, Baltimore, USA; ²Johns Hopkins University School of Medicine, Ped Gen Pediatrics Adoles Medicine, Baltimore, USA

10.1136/sextrans-2019-sti.500

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

Oluwamuyiwa Adebayo*. *The Pennsylvania State University, University Park, USA*

10.1136/sextrans-2019-sti.501

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