

10:15am -11:30am

11:30am - 1:00pm

## Inter-CFAR Collaboration on HIV Research in Women

Weds. & Thurs. December 6-7, 2023 In-Person in San Francisco, CA More info and Register here by 11/27!

# 2023 Women and HIV Symposium: Women and HIV across the Lifespan

December 6, 2023	OCSF Wilssion Bay Conference Center	DAY ONE	
7:30am	Registration Open and Breakfast Buffet		
8:30am – 8:40am	Conference Opening – Phyllis Tien, UCSF, and Renee Heffron, UAB		
	Inter-CFAR Collaboration on HIV Research in Women Working Group Co-Chairs		
Session 1: Reproductiv	e Health and HIV: From Policy to Practice		
8:40am – 10:00am	The US Perinatal Guidelines on Breastfeeding with HIV		
8:40am – 9:00am	The OB perspective		
	Speaker: Judy Levison, Baylor College of Medicine		
9:00am – 9:20am	The Pediatric perspective		
	Speaker: Elizabeth Lowenthal, University of Pennsylvania		
9:20am – 9:40am	The Patient perspective		
9:40am – 10:00am	Panel Discussion		
10:00am - 10:15am	Break		

Oral Abstract Presentations and Discussion

**Networking Lunch with Scientific Topic Breakouts** 

Session 2: Antiretroviral Therapy and Metabolism in the era of INSTIs: Sex and Gender Differences		
1:00pm – 1:20pm	INSTIs and Associated Metabolic Disorders in Women with HIV	
	Speaker: Cecile Lahiri, Emory University	
1:20pm – 1:40pm	Care Without Bias: Avoiding Weight Stigma When Managing Chronic Health in Women with HIV	
	Speaker: Amanda Willig, UAB	
1:40pm – 2:00pm	Sex Differences in Dolutegravir Exposure and Weight-Related Conditions	
	Speaker: Julie Dumond, UNC	
2:00pm – 2:20pm	Panel Discussion	
2:20pm – 2:45pm	Break	
2:45pm – 4:00pm	Oral Abstract Presentations and Discussion	
4:00pm – 6:00pm	Poster Presentations and Networking Mixer hosted by the UCSF Junior Faculty in AIDS Research	

December 7, 2023		UCSF Mission Bay Conference Center	DAY TWO
8:00am	Breakfast Buffet Opens		
Session 3: Aging with H	IV Across the Go	ender Spectrum	
8:30am – 8:50am	•	g HIV and Women's Research Cohorts	
8:50am – 9:10am	Sex Diffe	aker: Denise Russo, NICHD  rences in Aging and Inflammation  aker: Peter Hunt, UCSF	
9:10am – 9:30am	Burden o	f Chronic Comorbidities in Transwomen	
9:30am – 9:50am	Speaker: Tonia Poteat, UNC  ART Optimization and Cardiometabolic Health in Cis and Trans-Women  Speaker: Jordan Lake, UT Houston		
9:50am – 10:15am	Panel Discussion		
10:15am – 10:30am	Break		
10:30am - 11:30am	Oral Abst	ract Presentations and Discussion	
11:30am – 1:00pm	Networki	ng Lunch with Mentoring Topic Breakouts	

### Session 4: NIH HIV and Women Research Priorities and Wrap-up

1:00pm – 1:45pm	NIH HIV/AIDS Research Priorities & Listening Session

Speakers: Elizabeth Barr, Office of Research in Women's Health and Corette Byrd, Office of AIDS Research

1:45pm – 2:00pm Symposium Wrap-Up

### Women and HIV across the Lifespan

Wednesday, December 6, 2023 - 08:00 - Thursday, December 7, 2023 - 14:00 Fisher Banquet Room - William J. Rutter Center

The goal of the Inter-CFAR Women and HIV Symposium is to identify gaps in knowledge in HIV and women's research and develop strategies that will move the field forward. In order to accomplish this goal, we aim to generate collaborative activity between CFARs and other research networks, highlighting cutting-edge science and promoting opportunities for early career investigators.

### **Funding Acknowledgement:**

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Funding was also contributed by the UCSF-Bay Area CFAR (P30 Al027763) and the UAB CFAR (P30 Al027767), with additional travel support provided directly to attendees by their CFARs.

### **Conference Code of Conduct:**

We are committed to providing a safe and welcoming environment for all attendees at the 2023 Women and HIV Symposium. We expect all attendees to conduct themselves professionally, respectfully, and in accordance with our Conference Code of Conduct.

### **Session 1: Reproductive Health and HIV: From Policy to Practice**

The US Perinatal Guidelines on Breastfeeding with HIV

Session Leaders: Lauren Suchman (UCSF); Dominika Seidman (UCSF)

The OB perspective



Judy Levison, MD, MPH

Dr. Judy Levison is a professor in the Department of Obstetrics and Gynecology at Baylor College of Medicine, Houston, Texas. From 2002 to 2022, she led the Harris Health System Women's Program, which provides obstetric and gynecologic care for women living with HIV in Houston, Texas. She is on the national Perinatal Guidelines Panel and provides consultation for the national Perinatal Hotline.

### The Pediatric perspective



Elizabeth Lowenthal, MD, MS

Dr. Lowenthal is a pediatric HIV clinical specialist and epidemiologist whose

research work is primarily focused on pediatric global health. Much of her research relates to the care and treatment of children and adolescents with HIV in resource-limited settings. She is PI for two NIH R01-funded studies and she mentors a variety of junior investigators whose work involves pediatric global health or HIV. Dr. Lowenthal is involved with collaborative studies domestically, in multiple African countries, and in the Dominican Republic. She is the Research Director for the Children's Hospital of Philadelphia Global Health Center and Director of the Developmental Core for the Penn Center for AIDS Research.

### The Patient perspective

### **Reproductive Health Oral Abstract Presentations**

Session Leaders: Renee Heffron (UAB) + Susan Cohn (Northwestern)

STAR: The Study of Treatment and Reproductive Outcomes among Women of Childbearing Age Living with and Without HIV in the Southern U.S.

### Elizabeth Topper, PhD

Epidemiologist Johns Hopkins Bloomberg School of Public Health

### **Abstract Title**

STAR: The Study of Treatment and Reproductive Outcomes among Women of Childbearing Age Living with and Without HIV in the Southern U.S.

### **Abstract Authors**

Elizabeth F. Topper, Danielle Johnson, Seble Kassaye, Deborah L. Jones, Aadia Rana, Adaora Adimora, Daniel Westreich, Maria L. Alcaide, Anandi N. Sheth

### **Author Affiliations**

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### Background

In the US, approximately 1.2 million people are currently living with HIV (LWH). About 19% of incident diagnoses are among women, particularly women of color, and incidence is highest in the South. The Study of Treatment and Reproductive outcomes (STAR) was designed to recruit and retain a cohort of 2,000 women of reproductive age (ages 18-45), to investigate reproductive, mental, and oral health in the context of HIV.

#### Methods

Enrollment began in March 2021 in Washington DC, Chapel Hill NC, Miami FL, Atlanta GA, Birmingham AL, and Jackson MS, and is ongoing. Participants are seen semiannually, in person for 1.5 years and via phone thereafter. Women pregnant or post-partum at their phone check-in have additional in-person visits. Herein we describe the baseline cohort.

### **Results**

As of August 31, 2023, we enrolled 750 women. At enrollment, 475 (63%) women were LWH, and 76 (10%) were pregnant. Of the pregnant women, 58 (76%) were LWH. A significantly higher proportion of women LWH were pregnant at baseline, compared to women without HIV (12% vs 7%, p=0.0132). Twenty-one percent (N=161) were age < 30. Median (IQR) age was 37 (31-42) and was significantly lower among pregnant women (32 vs 38, p<0.001) and those without HIV (32 vs 39, p<0.001). There were 605 (81%) Black/African American and 78 (10%) Latina women. Women without HIV (14% vs 8%, p=0.058) were more likely to be Latina. Women enrolled during pregnancy were more likely to be: LWH (76% vs 62%, p=0.013), Latina (17% vs 10%, p=0.048), and have had sex with a man LWH (past 5 years, 32% vs 20%, p=0.005). Pregnant women were significantly less likely than non-pregnant women to have used illicit drugs in the past 5 years (11% vs 14%, p=0.008). No differences were found by race, income, education, or number of sex partners (p>0.05).

### Conclusion(s)

In this cohort of predominantly Black young women, we found a high proportion of HIV infection among young pregnant women, and a significantly higher proportion of pregnancy among Latina women. This cohort of young minority women serves as a platform for research on reproductive health and HIV.

Genital and Extragenital Sexually Transmitted Infections among Women of Reproductive Age in the Southern US Participating in the Study of Treatment and Reproductive Outcomes (STAR)

Nicholas Nogueira, MPH

## Research Data Manager University of Miami

### **Abstract Title**

Genital and Extragenital Sexually Transmitted Infections among Women of Reproductive Age in the Southern US Participating in the Study of Treatment and Reproductive outcomes (STAR)

#### **Abstract Authors**

Nicholas F. Nogueira, Paola Beato Fernandez, Yue Pan, Ana S. Salazar, Maria Gabriela Rodriguez, Gray Kelsey, Patricia Raccamarich, Laura Beauchamps, Daniel Westreich, Seble Kassaye, Elizabeth F. Topper, Aadia Rana, Deborah Konkle-Parker, Deborah L. Jones, Anandi N. Sheth, Maria L. Alcaide.

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Dr. Beauchamps: University of Miami, Miami, FL

Dr. Westreich: University of North Carolina, Chapel Hill, NC

Dr. Kassaye: Georgetown University, Washington DC

Dr. Topper: Johns Hopkins University, Baltimore, MD

Dr. Rana: University of Alabama-Birmingham, Birmingham, AL

Dr. Konkle-Parker: University of Mississippi Medical Center, Jackson, MS

Dr. Jones: University of Miami, Miami, FL Dr. Sheth: Emory University, Atlanta, GA

Dr. Alcaide: University of Miami, Miami, FL

### **Background**

Sexually transmitted infections (STI) are highly prevalent among women of reproductive age (WRA) and increase risk of HIV acquisition and transmission. However, the burden of genital and extragenital STIs is understudied among WRA in the U.S.. Estimates of disease are urgently needed, including among women with and without HIV, to inform sex-specific screening guidelines.

### **Methods**

Cross-sectional data from 519 cisgender women, 18-45 years-old enrolled in the STAR cohort from March 2021 to January 2023 at 6 Southern US sites were analyzed. Women living without HIV had at least one HIV risk factor in the previous 5 years. Socio-demographic and behavioral assessments were performed using structured interviewer-administered questionnaires. Nucleic-Acid Amplification Test (NAAT) was

performed regardless of symptoms on self-collected urine, rectal, and pharyngeal swabs to detect chlamydia, gonorrhea, and trichomoniasis. Sociodemographic characteristics, risk factors, and incidence of STIs were tabulated and group comparisons by HIV status were examined.

#### **Results**

Mean age was 34.6 ± 6.95 years; 79.6% were Black, 15.5% White, and 11.4% Hispanic. Overall, 52.8% had never married, 45.7 % had a monthly income of \$1500 or less, and 36.0% completed high school. Women had a median of 1 (IQR 1-2) male sexual partners in past year, 44.1% reported condomless vaginal sex in the past year, and 49% reported having ever had an STI: 35.2% reported a lifetime history of chlamydia, 26.0% gonorrhea, and 30.6% trichomoniasis. Current STI detected by NAAT did not differ by HIV status (22.0% HIV+ vs. 20.5% HIV-; p=0.946): vaginal chlamydia (2.1% HIV+ vs. 1.5% HIV-; p=0.915), rectal chlamydia (2.7% HIV+ vs. 3.1% HIV-; p=0.968), pharyngeal chlamydia (1.3% HIV+ vs. 0.0% HIV-; p=0.42), vaginal gonorrhea (3.8% HIV+ vs. 2.3% HIV-; p=0.727), rectal gonorrhea (0.9% HIV+ vs. 1.6% HIV-; p=0.843), pharyngeal gonorrhea (1.3% HIV+ vs. 0.8% HIV-; p=0.892), and trichomoniasis (14.3% HIV+ vs. 13.0% HIV-; p=0.937).

### Conclusion(s)

Prevalence of genital and extragenital chlamydia and gonorrhea, and genital trichomoniasis are high among WRA with and without HIV infection. The implications for women's reproductive health and HIV transmission highlight the importance of extragenital STI testing for women with HIV or vulnerable to HIV infection.

Maternal Mental Health and Outcomes of Referral for Mental Health Care Among Women Living with and without HIV in the Botswana-Based FLOURISH Study

### Queen Balina

Senior Research Assistant Massachusetts General Hospital

### **Abstract Title**

Maternal Mental Health and Outcomes of Referral for Mental Health Care Among Women Living with and without HIV in the Botswana-Based FLOURISH Study

### **Abstract Authors**

Queen M. Balina1,3, Gosego M. Masasa RN2, Samuel W. Kgole RN2, Sara R. Schenkel MPH3, Kathleen M. Powis MD, MPH2,4,5

### **Author Affiliations**

1Harvard College, Cambridge, MA, USA; 2Botswana Harvard Health Institute, Gaborone, Botswana, 3Division of Pediatric Global Health, Massachusetts General Hospital, Boston, MA, USA; 4Departments of Internal Medicine and Pediatrics, Massachusetts General Hospital, Boston, MA, USA, 5Department of Immunology and Infectious Diseases, Harvard T.H. Chan School of Public Health, Boston, MA, USA.

### **Background**

Poor mental health among women living with HIV can impact care engagement, treatment adherence, and parenting. We sought to quantify prevalence of depression and anxiety among mothers participating in the Botswana-based FLOURISH study, an ongoing longitudinal observational study following maternal-child pairs, including mothers living with and without HIV and their children, ranging in age from birth to 17 years.

#### Methods

Maternal participants are administered the PHQ-9 and GAD-7 standardized instruments at enrollment to screen for depression and anxiety, respectively. Prevalence of screening positive was compared by HIV status. Unadjusted and adjusted logistic regression models were fit to identify risk factors associated with screening positive.

### **Results**

1087 mothers, including 819 (75.3%) mothers living with HIV (MLHIV), were screened at FLOURISH study entry. Compared to mothers without HIV, MLHIV were older (38.9 years versus 30.9 years; p<0.0001), had lower academic attainment (p<0.0001), lower income (p<0.0001) and reported higher prevalence of severe food insecurity (p=0.001). A total of 104 (9.6%) mothers screened positive for depression including 90 (11.0%) MLHIV and 14 (5.1%) without HIV (p=0.06), including 52 (6.3%) MLHIV and 10 (3.7%) without HIV who screened positive for moderate to severe depression versus mild depression. Prevalence of screening positive for anxiety was 4.8% among MLHIV compared to 6.6% among mothers without HIV (p=0.20). In unadjusted analyses, living with HIV [Odds Ratio (OR) 1.8 (95% Confidence Interval (CI) 1.1, 3.1) p=0.02] and severe household food insecurity [OR 2.3 (95% CI 1.4, 3.9) p=0.002) were significantly associated with screening positive, but no association was noted between maternal age, education level, or household income. In adjusted analysis, severe household food insecurity remained significantly associated with screening positive of depression or anxiety [OR 2.4 (95% CI 1.4, 4.2) p=0.001] but the association between living with HIV and a positive screen was no longer significant after adjusting for age.

### Conclusion(s)

In this large cohort, mothers living with HIV were more likely to screen positive for depression, but not anxiety. Food insecurity was significantly associated with a positive screening score, highlighting the need for a comprehensive psychosocial support package of care in high burden HIV settings.

### Subscribe to Queen Balina

## Exploring preferences for long-acting injectable PrEP among postpartum women living in KwaZulu-Natal Province, South Africa

### Oluwaseyi Isehunwa, PhD, MPH

Postdoctoral Fellow University of Alabama at Birmingham

#### **Abstract Title**

Exploring preferences for long-acting injectable PrEP among postpartum women living in KwaZulu-Natal Province, South Africa.

**Abstract Authors** 

Oluwaseyi O. Isehunwa 1, Shannon Bosman2, Thandanani Madonsela2, Thembelihle P. Pita2, Lindani Msimango2, Londeka Mbewe2, Ayanda Tshazi2, Patricia M. Smith 1, Alastair Van Heerden 2,3, Lynn T. Matthews 1

#### **Author Affiliations**

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- 3. MRC/WITS Developmental Pathways for Health Research Unit Department of Paediatrics, Faculty of Health Science, University of the Witwatersrand, South Africa

### **Background**

Women in South Africa are disproportionately affected by HIV, with increased incidence during pregnancy and postpartum. While daily oral TDF/FTC PrEP is safe, effective, and recommended for pregnant and PP women exposed to HIV, daily pill adherence is challenging. Long-acting injectable (LAI) PrEP may be more desirable for postpartum women. Using the Consolidated Framework for Implementation Research (CFIR), we explored acceptability and factors that might influence LAI-CAB delivery for postpartum women in South Africa.

### **Methods**

Between March and April 2023, 4 focus group discussions (FGDs) were conducted among a one-year postpartum women in rural KwaZulu-Natal, South Africa. Enrolled women were not living with HIV and reported a male partner living with HIV or of unknown serostatus. Transcripts were analyzed using content analysis.

#### **Results**

The median age of 27 participants was 27 (range 19 -36) years. Five (19%) reported that their main pregnancy partner was living with HIV, 8 (30%) ever-used PrEP, and 25 (92%) had ever-breastfed. Preliminary emergent themes were observed in the innovation, inner setting, outer setting, and individual CFIR domains. 1) Need: Women expressed the need for HIV prevention interventions to protect themselves and their babies during the postpartum period. Discussion highlighted the tendency of men to seek other partners during postpartum abstinent periods, putting women at increased risk for HIV-exposure. Women were aware of oral PrEP and voiced concerns with postpartum use including frequent clinic visits, side-effects, forgetting to take pills, and antiretroviral use stigma. 2) High interest and preference for long-acting injectable: Women expressed that they would prefer LAI over oral PrEP due to perceived ease of use (less frequent visits, stigma), similarities to injectable contraception, especially if offered in a community setting. 3) Opportunities to promote LAI: Women suggested that mobile clinics, incentives, and integrating the delivery of LAI with child immunization could facilitate use. 4) Barriers to LAI: Women mentioned the anticipated cost of LAI, lack of transportation, and some concerns about safety while breastfeeding.

### Conclusion(s)

These findings highlight the need for HIV prevention modality choice among postpartum women, and opportunities to promote access in community settings to reduce the risk of HIV acquisition and perinatal transmission.

## Session 2: Antiretroviral Therapy and Metabolism in the era of INSTIS: Sex and Gender Differences

Session Leaders: Rebecca Abelman (UCSF) + Jennifer Cocohoba (UCSF)

INSTIs and Associated Metabolic Disorders in Women with HIV

### **Image**

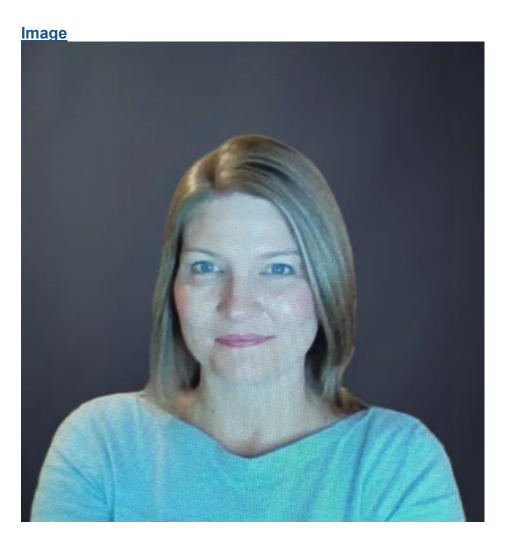


### Cecile Lahiri, MD, MS

Dr. Cecile Lahiri, MD, MSc, is an Associate Professor in the Emory University Department of Medicine and Division of Infectious Diseases. She received her undergraduate and medical degrees from the University of North Carolina-Chapel Hill and completed residency, fellowship, and a Master's degree in Clinical Research at Emory University. Dr. Lahiri provides care to persons living with HIV at the Grady Ponce de Leon Center, one of the largest HIV clinics in the nation, and is an attending infectious diseases physician at Grady Memorial Hospital in Atlanta, Georgia. Dr. Lahiri is also a clinical/translational HIV researcher whose NIH-funded work focuses on understanding factors that contribute to non-AIDS comorbidities, with a specific interest on the impact of sex. Dr. Lahiri has focused much of her research on understanding sex differences in the pathophysiology and consequences of chronic HIV infection and its long-term treatment through her roles as M-PI and Director of Research Development for the Emory Specialized Center of Research Excellence (SCORE) on Sex Differences and Co-Investigator of the Atlanta Multicenter AIDS Cohort/Women's Interagency HIV Study (MACS/WIHS) Combined Cohort Study. In her role with the

Emory SCORE, she co-created and directs the annual CME-accredited "Sex as a Biological Variable Workshop" to a national and international audience.

Care Without Bias: Avoiding Weight Stigma When Managing Chronic Health in Women with HIV



### Mandy Willig, PhD, RD

Dr. Amanda (Mandy) Willig is an Associate Professor in the Division of Infectious Diseases, School of Medicine at the University of Alabama at Birmingham (UAB), with a secondary appointment in the UAB Department of Nutrition Sciences. Her interdisciplinary research focuses on nutrition and physical activity solutions to reduce food insecurity and promote healthy aging in adults with HIV. She also serves as clinical liaison for the Birmingham AIDS Outreach Food and Education Delivery Program (B-FED), which provides food assistance and education for adults with HIV.

### **Sex Differences in Dolutegravir Exposure and Weight-Related Conditions**



### Julie Dumond, PharmD, MS

Julie Dumond is an Associate Professor in the Division of Pharmacotherapy and Experimental Therapeutics within the UNC Eshelman School of Pharmacy in Chapel Hill. She completed her pharmacy education at the University of Michigan, and also holds a Masters degree in Pharmacometrics from SUNY-Buffalo. She has over 15 years of clinical pharmacokinetic/pharmacodynamic research and data analysis experience, mainly focused on antiretroviral PK/PD in women and older people. She cochairs the Pharmacology Working Group within the MACS/WIHS Clinical Cohort Study, and her current R01 award is nested within the MWCCS,

with the goal of determining relationships between INSTI PK and weight, gender, and age.

### **ART and Metabolism Oral Abstract Presentations**

Session Leaders: Kate Powis (Harvard) + Phyllis Tien (UCSF)

Substance Use and Treatment Utilization Among Women of Reproductive Age with and without HIV in the Southern United States

### Ayako Wendy Fujita, MD

Infectious Diseases fellow Emory University

#### **Abstract Title**

Substance Use and Treatment Utilization Among Women of Reproductive Age with and without HIV in the Southern United States

#### **Abstract Authors**

Ayako Wendy Fujita, Christina Mehta, Qian Yang, Tina Tisdale, Maria Alcaide, Aadia Rana, Debbie Konkle-Parker, Daniel Westreich, Seble Kassaye, Elizabeth F. Topper, Anandi Sheth

#### **Author Affiliations**

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### **Background**

Women with HIV (WWH) who engage in substance use (SU) have worse HIV-related outcomes compared with men with SU or women without SU. Mortality associated with overdose extends beyond WWH, and has increased among pregnant and postpartum persons in recent years. We previously found higher than expected prevalence of SU treatment among women >50 years with SU. We characterized SU and

treatment among cisgender, reproductive age women enrolled in the Study for Treatment And Reproductive outcomes (STAR) cohort.

#### Methods

Baseline data from participants with/without HIV enrolled in STAR from 2021-2022 were analyzed to determine non-medical drug use in the past year. Alcohol, tobacco, and only-marijuana were included as covariates. SU treatment utilization was self-reported use of any drug treatment program in the past year among those with current SU. We assessed the proportion of SU and treatment among participants, stratified by current/recent pregnancy, and compared treatment by HIV status using Fisher's exact test. Recent pregnancy was defined as having a pregnancy outcome in the past 2 years.

### **Results**

Among 519 women (354 WWH, 165 HIV-), median age was 36 years, 75% identified as non-Hispanic Black, 11% were currently pregnant, and 10% recently pregnant. Overall, 12% (n=63) reported current SU (10% WWH, 16% HIV-). Among those, 67% reported crack/cocaine use, 24% benzodiazepines/barbiturates, 14% methamphetamines, 8% opioids, 3% used ≥2 drugs, and 10% injected drugs; 8% used tobacco, 24% daily alcohol use, and 64% marijuana. Among women without SU, 21% used tobacco, 7% daily alcohol, and 45% marijuana. Among women with SU, 19% (n=12) utilized treatment (25% WWH, 11% HIV-; p=0.20). Among women with SU, treatment in the past year was 25% (3/12) among currently/recently pregnant women and 16% (8/49) among those neither currently/recently pregnant. There was no statistically significant difference in SU treatment by HIV status within the stratified groups.

### Conclusion(s)

In a contemporary cohort of reproductive age women with/without HIV in the Southern US, current SU was common, less than 1/3rd utilized SU treatment, irrespective of HIV status, lower than previously reported from demographically similar women >50 years. Implementation strategies to tailor SU treatment to pregnant/postpartum women are needed.

Findings from a social media campaign using video logs to enhance HIV PrEP access to cisgender Black women in Harris County

### Mandy Hill, DrPH, MPH

Professor and Director of Population Health in Emergency Medicine University of Texas Health Science Center, Houston, McGovern Medical School

### **Abstract Title**

Leveraging video logs to support HIV PrEP access to Black women in Harris County

#### **Abstract Authors**

Mandy Hill, Sarah Sapp, Sandra Coker, Tristen Sutton, Diane Santa Maria Author Affiliations

UTHealth Houston, Houston, TX Tristen Sutton Consulting, Houston, TX

### **Background**

Cisgender Black women (CBW) account for 2% of pre-exposure prophylaxis (PrEP)-eligible people in the United States who use PrEP to prevent HIV. In correlation with low PrEP use, CBW continue to contract HIV more than women from every other racial group. Intervention efforts that can bridge the link between knowing that PrEP prevents HIV and support with access to PrEP are necessary for CBW.

#### **Methods**

The team formerly piloted full-length vlogs (10-12 minutes each) with 26 women during an emergency department visit. In a prospective 6-month social media marketing campaign, the study team led a Texas-Development CFAR (TX-DCFAR) pilot grant to disseminate brief vlog snippets (30 seconds) of excerpts from the full-length vlogs with a larger group of Black women in Harris County. The purpose of the vlogs through the campaign was to share information about ways to prevent HIV using PrEP and fact-based education, and provide access to PrEP resources with active links to local PrEP providers at local community health centers. Community members, who were aged 18 -55 years, usually consume content that is often viewed by CBW (i.e. health/beauty), and reside in neighborhoods (based on zip code) in Harris County where most residents are Black or African American, were shown a series of brief vlog snippets on their social media pages, along with a brief message about PrEP and an active hyperlink to local PrEP resources.

### **Results**

Within 6 months, the campaign reach 110.8K unique individuals who identify as women. Key performance indicators showed 1,098,629 impressions, 1,002,244 total video plays, and resulted in 15,952 link clicks to local PrEP resources. Findings were stratified by age, illustrating that video plays at 50% of the vlogs (n=30,877) were most common among women ages 18-24 years (n=12,017) and least common among women ages 45-54 years (n=658).

### Conclusion(s)

The campaign illustrated preliminary effectiveness at supporting access to local PrEP resources with CBW. Further research is necessary to assess whether vlog viewership and clicks on links to PrEP resources can meaningfully empower CBW to access to PrEP and/or help them to assess whether PrEP is a useful HIV prevention option.

### Provider perspectives on ideal candidates for long-acting antiretroviral therapy for HIV treatment: A multi-site qualitative study in the United States

### Morgan Philbin, PhD

### Associate Professor **UCSF**

#### **Abstract Title**

Provider perspectives on ideal candidates for long-acting antiretroviral therapy for HIV treatment: A multisite qualitative study in the United States

### **Abstract Authors**

Morgan M. Philbin, Tara McCrimmon, Lauren F. Collins, Victoria A. Shaffer, Maria L. Alcaide

#### **Author Affiliations**

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McCrimmon: Columbia University, New York, NY

Collins: Emory University, Atlanta, GA

Shaffer: University of Missouri, Columbia, MO

Alcaide: University of Miami, Miami, FL

### **Background**

Clinics have begun scaling-up long-acting injectable (LAI) ART, but existing inequities in treatment access may limit uptake among marginalized individuals, including women who have lower rates of viral suppression than men. HIV providers play key roles in supporting and determining patients' LAI ART access. We therefore examined how providers determine which patients are candidates for LAI ART, and how this may influence to whom LAI ART is offered.

### **Methods**

We interviewed 38 HIV providers at academic medical centers and private clinics across six U.S. cities (Atlanta, Miami, Pittsburgh, Brooklyn, Jackson, and Birmingham). We explored their perspectives on patients' LAI ART candidacy, their opinions on the eligibility criteria for LAI ART as set forth by the U.S. Food and Drug Administration (FDA), and how they apply those criteria. We employed thematic content analysis to identify key findings.

### **Results**

Providers identified three key considerations regarding who should be offered LAI ART: 1) Eligibility concerns: patients with detectable viral loads could benefit the most from LAI ART, but are not eligible per FDA label approval: "I'm not sure the label is serving those most in need". Providers also thought that adherent patients might not want LAI ART since it required more clinic visits: "Why should I come every month if I now see my doctor every six months?"; 2) Individual patient assessment: Providers wanted to maintain autonomy and assess patients individually based on clinic attendance and co-occurring health issues versus the FDA label approval: "It's not one size fits all."; and 3) Sex/Gender differences: Providers described female patients as more reliable: "Women are going to show up and get it done." However, providers were concerned about offering LAI ART to women of reproductive age since pregnant people were not included in LAI ART clinical trials.

### Conclusion(s)

Providers used multiple approaches and diverse considerations to evaluate patients' LAI ART candidacy, which may perpetuate inequities in access at the population level. This is particularly true for women who face unique barriers to medication access and adherence. This suggests a need for standardized guidance on equitably offering LAI ART to eligible patients.

## The Antiretroviral Pregnancy Registry: 30 Years of Monitoring for Congenital Anomalies

### William Short, MD, MPH

Associate Professor of Medicine University of Pennsylvania

#### **Abstract Title**

The Antiretroviral Pregnancy Registry: 30 Years of Monitoring for Congenital Anomalies Abstract Authors

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### **Background**

Antiretrovirals (ARVs) reduce perinatal transmission of HIV. Due to exclusion of pregnant persons from registrational trials, safety data are limited when a drug is granted Food and Drug Administration approval leaving a critical knowledge gap in data that is needed for safe use of ARVs during pregnancy. In 1989, the Antiretroviral Pregnancy Registry (APR) began monitoring prenatal ARV use to detect an early signal of teratogenicity.

#### **Methods**

The APR is a voluntary, prospective, exposure-registration cohort study with data from 75 countries. Prevalence of congenital anomalies (CAs) are estimated and compared to both internal (1st trimester vs 2nd/3rd trimester) and external comparator groups (Metropolitan Atlanta Congenital Defect program (MACDP) and Texas Birth Defects Registry (TBDR).

#### **Results**

Of the 22,887 evaluable pregnancies enrolled through 31January2023, there were 21,636 live births (LB) with ARV exposure at any time during pregnancy and 631 CAs. Prevalence of CAs was 2.9 % (95% CI: 2.7-3.2) overall, 3.0 % (95% CI: 2.7-3.3) among 1st trimester exposures and 2.8% (95% CI: 2.5-3.2) among 2nd/3rd trimester exposures to ARVs. Prevalence Ratio comparing 1st vs 2nd/3rd trimester exposures was 1.04 (95% CI: 0.89-1.21). Twenty-three ARVs have sufficient 1st trimester exposures to detect at least a 2-fold increase in risk of CAs overall, of which 11 can detect a 1.5-fold increase of overall effects and a 2-fold increased risk of birth defects in the more common classes, cardiovascular and genitourinary systems. See figure 1 for a summary of birth defects among prospective cases with outcomes enrolled in APR with first trimester exposures.

### Conclusion(s)

The APR has not found a significant difference in overall CA prevalence compared to two population-based surveillance systems: 2.72/100 LB (95% CI: 2.68-2.76) MACDP and 4.17/100 LB (95% CI: 4.15-4.19) TBDR. Two ARVs, didanosine and nelfinavir, have a modest but statistically significant increased prevalence compared to the MACDP but not the TBDR. The APR independent Advisory Committee concludes, "The Registry finds no significant increases in frequency of defects with first trimester exposures compared to exposures starting later in pregnancy and no pattern to suggest a common cause; however, potential limitations of registries should be recognized".

### **Session 3: Aging with HIV Across the Gender Spectrum**

Session Leaders: Caitlin Moran (Emory) & Renee Heffron (UAB)

Leveraging HIV and Women's Research: An NICHD Overview

### Denise Russo, PhD, MS

### Gretchen Buckler, MD, MPH

### **Sex Differences in Aging and Inflammation**



Rebecca Abelman, MD

**Cardiometabolic Comorbidities among Trans Women with HIV** 

<u>Image</u>



### Tonia Poteat, PhD, MPH, PA-C

Dr. Tonia Poteat is a Professor in the Duke University School of Nursing and Co-Director of the Duke Sexual and Gender Minority Health Program. Her research, teaching, and clinical practice focus on HIV and LGBTQ health with particular attention to the health of transgender communities. Her research attends to the role of intersectional structural stigma in driving health inequities and seeks to identify strategies to advance health justice. Certified as an HIV Specialist by the American Academy of HIV Medicine and Gender Specialist by the World Professional Association for Transgender Health, she is an expert in HIV research and care with transgender persons. She is an associate editor for the journal LGBT Health and serves on the Department of Health and Human Services Adolescent and Adult HIV Treatment Guidelines panel. She founded and co-leads the Inter-CFAR Transgender Health Scientific Working Group.

ART Optimization and Cardiometabolic Health in Cis and Trans-Women

**Image** 



### Jordan Lake, MD, MS

Jordan E. Lake M.D., M.Sc. is Professor of Medicine with Tenure at the McGovern School of Medicine. She completed both medical school and Internal Medicine residency at Baylor College of Medicine in Houston, Texas, followed by an Infectious Diseases fellowship and Master of Science in Clinical Research degree program at the University of California, Los Angeles. Dr. Lake's outpatient practice focuses on adults with HIV. Her translational research portfolio focuses on the treatment of metabolic complications of HIV and antiretroviral therapy, including optimization of care for transgender women with HIV.

### **Aging Oral Abstract Presentations**

Session Leaders: Nadia Roan (UCSF) & Phyllis Tien (UCSF)

Association of Pregnancy History and Age with the Burden of Non-AIDS Comorbidities Among Women with and without HIV in the Southern U.S.

### Lauren Collins, MD, MS

Assistant Professor of Medicine, Division of Infectious Diseases Emory University School of Medicine

### **Abstract Title**

Association of Pregnancy History and Age with the Burden of Non-AIDS Comorbidities Among Women with and without HIV in the Southern U.S.

#### **Abstract Authors**

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### **Background**

Women with HIV (WWH) have a higher burden and earlier onset of non-AIDS comorbidities (NACM) than women without HIV (WwoH); the impact of reproductive history is largely unknown.

### **Methods**

We performed a cross-sectional analysis of the Study of Treatment And Reproductive outcomes (STAR) cohort, a longitudinal study of women 18-45 years old with and without HIV enrolled across 6 sites in the U.S. South. NACM prevalence and burden (total NACM count of 12 assessed) was determined at STAR enrollment. Pregnancy history was categorized as zero, 1-2, or ≥3 prior pregnancies. Linear regression models evaluated association of NACM burden with HIV serostatus, age, and pregnancy history.

### **Results**

Among 519 women (354 WWH; 165 WwoH), median age was 36 years, 75% reported non-Hispanic Black race, 45% ever smoked; 22%, 32%, and 46% had zero, 1-2, and ≥3 pregnancies, respectively. Among WWH, median CD4 count was 666 cells/mm3 and 77% had HIV-1 RNA <200 cp/ml. NACM prevalence was (WWH/WwoH): obesity (59%/55%), psychiatric illness (54%/46%), anemia (38%/30%), lung disease (30%/29%), hypertension (25%/26%), bone disease (25%/28%), diabetes (8%/6%), cardiovascular disease (7%/4%), liver disease (7%/1%), dyslipidemia (4%/3%), kidney disease (3%/1%), non-AIDS cancer (1%/1%). Among women with available data for all NACM assessed (n=332), WWH versus WwoH had a mean NACM burden of 2.5 vs 2.4, p=0.24. Among women overall, mean NACM burden increased with age group: 1.9 (18-24y), 2.2 (25-29y), 2.5 (30-34y), 2.7 (35-39y), 2.7 (40-45y) (p-trend=0.002). Among women with zero, 1-2, ≥3 pregnancies, age-adjusted mean NACM burden was 2.4, 2.2, and 2.6 (p-trend=0.20). HIV serostatus did not modify the effect of age and pregnancy history on NACM burden (HIV\*age\*pregnancy interaction p=0.76). Among women across HIV status, pregnancy history was

associated with estimated NACM burden only in certain age groups: 18-24y (p-trend>0.99), 25-29y (p-trend=0.03), 30-34y (p-trend=0.11), 35-39y (p-trend=0.21), 40-45y (p-trend=0.71).

### Conclusion(s)

Among reproductive age women with and without HIV in the U.S. South, the burden of 12 NACM was high overall, increased with age, and was associated with pregnancy history in some age groups. These data may inform the development and timing of NACM screening and prevention strategies to be deployed across the reproductive lifecourse.

## Widowed and at risk: Increasing HIV prevalence among Kenyan widows in the last decade

Jackline Odhiambo, MS

PhD Student Maseno University

#### **Abstract Title**

Widowed and at risk: Increasing HIV prevalence among Kenyan widows in the last decade

#### **Abstract Authors**

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### **Background**

The majority (66%) of the 1.3 million people living with HIV in Kenya are women. Sexual behaviors increase the risk of HIV transmission; however, little is known about the HIV epidemiology among widowed women. Using 11 years of data, we measured the HIV prevalence and its correlates among widowed women, in comparison to married women in Siaya, Kenya.

#### **Methods**

We conducted a cross-sectional analysis of data collected between 2011 and 2022 for widowed and married women enrolled in the health and demographic surveillance system in Siaya, Kenya. Widows were

women who reported ever having a deceased husband. The participants' HIV status was determined either by blood tests or self-report. We reported the HIV prevalence among widowed and married women and assessed the correlates of HIV infection by logistic regression analysis.

#### **Results**

Of 14,445 women included in the study, 27.2% (3,930) were ever widows and 72.8% (10,515) were married women. Widows had an overall HIV prevalence of 24.1% (95%CI: 23.5% - 24.6%) compared to 17.5% (95%CI: 17.1% - 17.8%) for married women. In the last decade, the trend in HIV prevalence increased among widows while declined among married women. HIV prevalence was higher in widowed than married women across all characteristics: <45 years (55.8% vs 18.4%), 45-59 years (46.7% vs 18.6%), having a younger sexual partner (69.9% vs 34.0%), ever had transactional sex (62.9% vs 16.6%), and ever experienced forced sex (42.4% vs 21.1%). In the adjusted analysis, widows had 4.12 times higher odds of HIV prevalence than married women (95%CI: 3.62, 4.67). The odds of HIV infection were higher among younger (<45 years) than older women (60+ years) (AOR: 13.2, 95%CI: 10.5, 16.5), women in age-disparate relationships with younger compared to older male sexual partners (AOR: 2.20, 95%CI: 1.75, 2.77), and women who ever experienced forced sex (AOR 1.24, 95%CI: 1.10, 1.40).

### Conclusion(s)

From a decade long follow-up, we show a disproportionately high and increasing rate of HIV infection among widowed women in Siaya, Kenya. This is significantly elevated among; the younger women, women with younger sexual partners, and who experienced forced or transactional sex. This calls for policy to prioritize widows in HIV control strategies and develop targeted interventions that address the unique challenges they face.

## Oral Health Related Quality of Life and Unmet Dental Needs among Reproductive Aged Women with HIV

Carrigan Parish, DMD, PhD

Assistant Professor Columbia University

### **Abstract Title**

Oral Health Related Quality of Life and Unmet Dental Needs among Reproductive Aged Women with HIV Abstract Authors

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### Background

Women with HIV (WWH) of reproductive age encounter many barriers leading to oral health disparities, including caregiving responsibilities, eclipsing medical needs, and financial barriers that impede routine, preventive dental care. Oral health-related quality of life (OHRQOL) is a multidimensional, perception-based measure of how oral health impacts social and physical functioning and self-image. Understanding oral health conditions and OHRQOL among reproductive age WWH is critical to identify unmet dental needs and related health implications.

### **Methods**

The Study of Treatment And Reproductive outcomes (STAR) is a prospective, observational cohort study of reproductive-aged WWH and women without HIV (WWOH) conducted in 6 Southern cities. Participants (N = 518; 354 WWH/164 WWOH) completed semiannual study visits using structured interviews to capture oral health data and the 5-item Oral Health Impact Profile (OHIP) to assess OHRQOL. This analysis examines oral health and OHRQOL stratified by HIV status.

#### **Results**

Participants' median age was 35 [range 18–45] years. Less than half of women had received dental care in the past year (47.2% WWH/45.1% WWOH; p=0.624). Approximately one-third of women reported having a dental problem but did not seek treatment (30.2% WWH/31.1% WWOH; p=0.208), with the most common reason being uninsured or unable to afford dental care (15.0% WWH/18.9% WWOH; p=0.264). More WWOH self-reported their oral health status as being excellent/good (51.9% WWOH/43.2% WWH; p=0.204). The mean OHIP score [range 0 – 20] for WWH (4.09, standard deviation (SD) = 4.85) trended higher (reflecting worse OHRQOL) than that of WWOH (3.13, SD = 4.02; p=.095).

#### Conclusion(s)

Study findings show suboptimal use of dental care and high unmet needs in reproductive age WWH, specifically in the setting of financial barriers, and potentially worse OHRQOL compared to WWOH. Dental assessments and OHRQOL administered in HIV research settings can identify significant dental treatment

needs in the context of HIV infection. Assessing factors that affect oral health in these populations provides critical information on unmet dental needs and identified gaps should guide care delivery. The relationships between dental needs, OHRQOL, and other indices of HIV and general health have important clinical implication and are key to understanding oral health among WWH.

### Session 4: NIH HIV and Women Research Priorities and Wrap-up

Session Leader: Maria Alcaide (Miami) & Kate Powis (Harvard)

### NIH HIV/AIDS in Women Research Priorities & Listening Session



Elizabeth Barr, PhD, MS

Elizabeth Barr is a Program Officer with the NIH Office of Research on

Women's Health (ORWH). Dr. Barr coordinates ORWH's efforts to advance intersectional health research on <u>gender</u> as a social and structural variable, manages the ORWH <u>interprofessional education</u> program, and leads efforts to advance <u>HIV research for women</u>. Her background is in gender studies, community-led HIV research, and reproductive justice. Dr. Barr completed her Ph.D. at the University of Wisconsin–Madison in Rhetoric, Politics, and Culture and her M.S. Towson University in Women's and Gender Studies. Prior to joining ORWH in 2019, Dr. Barr served on the faculties of Towson University and the University of Maryland, Baltimore County and led interdisciplinary, cross-sector projects to increase women's engagement in clinical research.



Coretté Byrd, MS, RN

Ms. Coretté Byrd is a Health Science Policy Analyst at the NIH OAR where she leads several cross-cutting initiatives within NIH OAR and across NIH. Ms. Byrd is an experienced healthcare leader with almost 20 years of experience leading and developing healthcare policies and programs. Ms. Byrd has clinical nursing experience in caring for and managing patients with infectious and chronic diseases, and acute conditions. Ms. Byrd also has expertise in translating research into practical applications to inform programs and policies that benefit public health. Ms. Byrd has research interests in disease prevention, child and women's health issues, health disparities, and infectious and chronic diseases. Ms. Byrd received a M.S. in Health Systems Management from George Mason University, a B.S. in Nursing from Georgetown University, and a B.S. in Marketing from the University of Alabama at Birmingham. Currently, Ms. Byrd is pursuing her doctoral studies in Public Health at Loma Linda University.

### **Invited Posters**

Barriers and Facilitators to Integrating PrEP into Women's Health Clinical Services in the United States (US)

### Kandis Backus, PharmD, MS

Senior Medical Scientist Gilead Sciences

### **Abstract Title**

Barriers and Facilitators to Integrating PrEP into Women's Health Clinical Services in the United States (US)
Abstract Authors

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Cathy J. Berry and Associates (Bethany Spier, Cathy J. Berry)

### **Background**

PrEP has not been routinely integrated into women's health clinical services in the US, likely contributing to suboptimal PrEP uptake. We investigated barriers and facilitators to integrating PrEP into women's health clinical services from the perspective of patients and clinical staff in a midsize city in the northeast US.

#### Methods

In April 2023 we conducted two focus group discussions (FGDs) with 22 cisgender women of color. Discussions focused on patient awareness/knowledge of PrEP, experiences accessing sexual healthcare, and preferences in services offered by PrEP providers. In May-June 2023 we conducted one-on-one indepth interviews (IDI) with 11 clinical staff (medical assistants, nurses, physicians/midwives) in an Obstetrics/Gynecology private practice. Interviews focused on staff awareness/knowledge of PrEP, desire to offer PrEP, and barriers/facilitators to integrating PrEP into clinic flow. Thematic analysis, informed by the COM-B and Theoretical Domains Framework, was used to identify determinants of integration.

#### **Results**

The median age of FGD participants was 20 years and 91% identified as Black. Key themes included: low awareness of and misconceptions about PrEP (e.g., PrEP is for gay men); perceived stigma about PrEP (e.g., PrEP implies multiple sexual partnerships); previous negative experiences seeking medical care (e.g., feeling judged); desire for clinics to promote PrEP as a self-care tool and integrate it with holistic reproductive healthcare. Women noted perceived barriers related to cost/insurance and accessibility but also a willingness and desire to incorporate PrEP into daily routines. Most IDI participants worked in the practice for >3 years. Similar to patient-level themes, clinical staff had low awareness of and misconceptions about PrEP. Barriers to integrating PrEP included: lack of PrEP knowledge, lack of time to integrate PrEP services within routine visits, challenges with billing insurance for integrated services, and heterogeneity in comfort with sexual health discussions with patients. Facilitators included staff buy-in to provide PrEP and willingness to adapt clinical protocols to integrate PrEP, rooted in recognition that HIV prevention is important for their patients and community.

### Conclusion(s)

Similar misconceptions about PrEP exist among cisgender women in the community and clinical providers working in women's health. Directly addressing shared and distinct patient and provider-level concerns may facilitate integration of services.

Distinct cytokine profiles in late pregnancy in Ugandan people with HIV

### Lisa Bebell, MD, MS

## Assistant Professor and Associate Physician Harvard Medical School and Massachusetts General Hospital

### **Abstract Title**

Distinct cytokine profiles in late pregnancy in Ugandan people with HIV

#### **Abstract Authors**

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### **Background**

During pregnancy, multiple immune regulatory mechanisms are activated to establish an immune-tolerant environment for the allogeneic fetus, including cellular signals called cytokines that modify immune responses. However, the impact of maternal HIV infection on these responses is incompletely characterized.

#### **Methods**

We analyzed paired maternal and umbilical cord plasma collected during labor from 147 pregnant people with HIV (PPHIV) taking antiretroviral therapy (ART) and 142 HIV-uninfected comparators. We used multiplex immunoassays to measure 27 chemokines and inflammatory cytokines in paired maternal and

umbilical cord plasma and grouped cytokine into T-helper 1 (Th1) and T-helper 2 (Th2) phenotypes. We built Partial Least Squares Discriminant Analysis (PLSDA) models to assess how cytokines differed between maternal and umbilical cord plasma, and HIV serostatus/exposure.

#### **Results**

All PPHIV reported taking ART, 54% started ART preconception, and 28% had detectable HIV viremia. Among those with viremia, median HIV viral load was 718 copies/mL, and median CD4 T-cell count was 426 cells/mm3. Overall cytokine levels were similar between maternal HIV serostatus and viremia groups. P-selectin, IL- $\beta$ , IL-12p70, and IL-13 were the most frequently detected cytokines in both maternal and umbilical cord plasma (>90% of samples). GM-CSF, IL-4, and TNF- $\alpha$  were more frequently detected in maternal than umbilical cord plasma, whereas IL-6 and SDF- $\alpha$  were more frequently detected in umbilical cord plasma. IL-1 $\alpha$ , IFN- $\alpha$ , and Gro $\alpha$  KC were the least frequently detected (<30% of samples). Using PLSDA, we identified distinct cytokine profiles in each maternal HIV serostatus/umbilical cord exposure group, driven by higher IL-5 and lower IL-8 and MIP-1 $\alpha$  levels in PPHIV, and higher RANTES and E-selectin in HIV-unexposed umbilical cord plasma (P-value <0.01). Furthermore, maternal RANTES, SDF- $\alpha$ , gro $\alpha$  - KC, IL-6, and IP-10 levels differed by HIV serostatus (P <0.01). Although global maternal and umbilical cord cytokine profiles differed significantly (P <0.01), umbilical cord plasma profiles did not differ by maternal HIV serostatus.

### Conclusion(s)

HIV infection was associated with a distinct maternal plasma cytokine profile which was not transferred across the placenta, indicating a placental role in coordinating local inflammatory response. Furthermore, cytokine profiles in PPHIV suggested an incomplete shift from Th2 to Th1 phenotype at the end of pregnancy.

Recent Intravaginal Practices are Associated with Altered Accuracy of Tests for Bacterial Vaginosis, but do not Completely Interfere with Tests for Semen Exposure: Implications for HIV Prevention Research

### Emily Cherenack, PhD

Postdoctoral Scholar University of Miami

### **Abstract 1 Title**

Recent Intravaginal Practices are Associated with Altered Accuracy of Tests for Bacterial Vaginosis, but do not Completely Interfere with Tests for Semen Exposure: Implications for HIV Prevention Research

#### **Abstract 1 Authors**

Emily M. Cherenack, Nicholas F. Nogueira, Yue Pan, Patricia Raccamarich, Gray Kelsey, Margarita Avila, Courtney A. Broedlow, Deborah L. Jones, Nichole R. Klatt, Maria L. Alcaide

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- University of Minnesota, Minneapolis, MN (Broedlow, Klatt)

### **Background**

Intravaginal practices (IVPs) include douching and the introduction of products inside the vagina for perceived hygiene purposes. IVPs are common among sexually active women and may contribute to bacterial vaginosis (BV), a condition known to increase HIV acquisition risk. It is unknown if IVPs impact the performance of vaginal assays used in HIV prevention research.

Methods

This study enrolled 444 sexually active women of reproductive age without HIV in Miami, Florida, a city with high rates of HIV transmission. Survey and vaginal biospecimen data were collected to assess IVPs in the three days preceding biospecimen collection, examine the association between IVPs and concordance between clinical measures of BV by Amsel Criteria and Nugent Scoring, and investigate the ability to detect semen via prostate specific antigen (PSA) tests among women with recent IVPs.

#### Results

IVPs in the past three days were reported by 14% (n = 60) of all women, 16% of women with BV (n = 34), and 43% (n = 25) of women with condomless intercourse in the past three days. About half of women (49%, n = 216) were diagnosed with BV per Nugent Scoring (38%, n = 170) and/or Amsel Criteria (45%, n = 198), including 34% (n = 152) positive on both, 10% (n = 46) just Amsel positive, and 4% (n = 18) just Nugent positive. When comparing Amsel Criteria to the gold standard of Nugent Scoring, women with recent IVPs showed lower accuracy (78% vs. 86%), higher sensitivity (95% vs. 88%), and lower specificity (68% vs. 84%) than women without recent IVPs. Half (47%, n = 209) of women never used condoms in the past month; 28% (n = 58) of these participants had intercourse in the past three days, and 8% (n = 17) had detectable PSA. IVPs were reported by 41% (n = 7/17) with detectable PSA. Conclusion(s)

Women with recent IVPs show decreased accuracy of clinical measures for BV. Although recent IVPs are common among women reporting intercourse, PSA tests can detect semen despite recent IVPs. Results highlight the importance of including IVP assessments in HIV prevention research for women.

## A More Positive Attitude Towards One's Own Aging is Associated with Better Physical Functioning Among Women Living with HIV

### Emily Cherenack, PhD

#### **Abstract 2 Title**

A More Positive Attitude Towards One's Own Aging is Associated with Better Physical Functioning Among Women Living with HIV

### **Abstract 2 Authors**

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### **Background**

A more positive attitude towards one's own aging (ATA) is associated with better health in the general population, but little is known about ATA among reproductive-age women living with HIV (WLWH). Investigating the association of ATA with health outcomes, such as physical functioning, and resources that could be provided in HIV clinics, such as health-related social support (HRSS), is an essential step in the development of psychosocial interventions to improve ATA and health among WLWH. This analysis tested the hypotheses that HRSS among WLWH is associated with ATA, and ATA is associated with physical functioning, independently and when controlling for theoretically selected covariates.

### **Methods**

Baseline data from 2021-2022 were collected in the ongoing Study of Treatment and Reproductive Outcomes enrolling women 18- to 45-years-old with and without HIV across the southern US. Interviewer-administered surveys included validated measures of age, ATA, HRSS, impact of health on physical functioning, and past-year hospitalization for medical illness. Current pregnancy, HIV, and CD4+ T-cell count were biologically confirmed. ATA was compared across HIV and pregnancy status. Among non-pregnant WLWH, regressions examined the association of HRSS with ATA and of ATA with physical

functioning and CD4+ Count independently and controlling for age and hospitalization in both models and HRSS in the model for physical functioning.

#### Results

We enrolled 279 eligible participants (Mean age=37 years, 86% Black, 5% pregnant, 80% WLWH). ATA did not differ by age, HIV, or pregnancy. In bivariate correlations, ATA, but not age, correlated with HRSS (r=0.46) and physical functioning (r=0.36). After restricting the sample to 201 non-pregnant WLWH, greater HRSS was associated with more positive ATA (Adj R2=0.19,  $\beta$ -unadjusted=0.4, p-unadjusted<0.001), and ATA was positively associated with physical functioning (Adj R2=0.13,  $\beta$ -unadjusted=0.3, p-unadjusted<0.001). Both associations remained significant at p-adjusted<0.001 after controlling for covariates. ATA was not associated with CD4+ Count.

### Conclusion(s)

ATA was associated with HRSS and physical functioning among WLWH. Although causality cannot be inferred, this provides preliminary evidence that longitudinal and experimental research is warranted to examine causal associations between HRSS, ATA, and physical functioning, with the long-term goal of developing interventions to improve aging experiences among WLWH.

## Design and Evaluation of Stabilized Envelopes for Targeting HIV-1 V2-apex Broad Neutralizing Antibody Precursors

Severin Coleon, PhD

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Duke Human Vaccine Institute

### **Abstract Title**

Design and Evaluation of Stabilized Envelopes for Targeting HIV-1 V2-apex Broad Neutralizing Antibody Precursors

### **Abstract Authors**

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### Background

Broad neutralizing antibodies (bnAbs) directed against the second variable region peptide and proximal glycans (termed the V2-apex site) of the HIV-1 envelope (Env) trimer are known for their exceptional potency. Thus, one strategy for developing an HIV-1 vaccine consists of engineering Env immunogen trimers to elicit V2-apex bnAbs. The first step in eliciting V2-apex bnAbs is to engage their unmutated antibody precursors. However, V2 apex precursors have long complementarity determining regions, which are rare in the naive antibody repertoire. To overcome the rarity of V2-apex bnAb precursors, we sought to design Env immunogens that engage multiples precursors of V2-apex bnAbs. We hypothesized that Envs from CAP256 viruses that were isolated from an individual who developed V2 Apex bnAbs could be engineered to engage additional V2-apex bnAb precursors.

### Methods

A stabilized prefusion-closed trimer SOSIP version of CAP256.wk34.c80 Env sequences was mutated in the V2-apex region to optimize bnAbs precursor reactivity. Soluble Env proteins were expressed using Freestyle 293F cells. Mutated envelopes were tested for their ability to bind V2-apex bnAbs and inferred precursors. Positive binding Envs were selected to make conjugate nanoparticles. Binding magnitude and kinetics for each Env were assessed by ELISA and bio-layer interferometry (BLI) respectively. In addition, gp150 and gp145 versions of the selected envelopes were designed as mRNA immunogens, referred as CAP256SU, and stabilized using several V3-stabilizing mutations such as Q328M. mRNA constructs were transfected into Freestyle 293F cells and examined for their ability to express HIV-1 Env trimers that preferentially bind to bnAbs as compared to non-nAbs by flow cytometry.

### Results

Soluble CAP256.wk34.c80 Env trimers bearing three different motifs: DKKKK, DKKRK or DKRRK in the V2 region at position 167-171 were produced. Strong binding was observed against six HIV-1 V2-apex bnAbs (PGT145, VRC26.25, CH01, PG9, PG16, PCT64) for all three envelopes. High binding to CH01 RUA was also observed for all three envelopes. Interestingly the DKRRK motif improved the binding to PG9 UCA and PG16 UCA as compared to the other two, but lost its ability to bind VRC26.UCA. DKKRK envelopes conjugated to nanoparticles showed a binding increase for eight of the twenty-two V2-apex glycan precursors tested as opposed to the trimer alone, highlighting the effects of avidity of the nanoparticles. In addition, a Q328M substitution stabilized CAP256SU gp150 expressed by mRNAs, with a notable binding increase for PG9 and PG16 and CH01 RUA. Overall, the gp150 expression from mRNAs was higher than gp145.

### Conclusion(s)

Here we show HIV-1 Env trimers can be designed to bind to multiple human and rhesus macaque V2-apex bnAb precursors. Avidity increases the reactivity with V2-apex bnAb precursors. These new antigens will be tested as part of a sequential HIV-1 vaccine strategy, and will be used as antigens for determining V2 apex bnAbs precursor frequencies and immunogenetics.

# Exploring intravaginal practices among Haitian women as a risk factor for adverse sexual and reproductive health outcomes

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#### **Abstract Title**

Exploring intravaginal practices among Haitian women as a risk factor for adverse sexual and reproductive health outcomes

#### **Abstract Authors**

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## Background

Haiti has the highest incidence rates of HIV and cervical cancer in the Caribbean. This burden of HIV and cervical cancer is also reflected amongst Haitian migrants in the United States. Intravaginal practices involving plants, herbs, chemicals, and other agents are commonly used among Haitian women for maintenance of their gynecological health. Recent studies have noted that such practices can significantly alter the vaginal microbiome, and result in a higher predisposition towards Human Papillomavirus (HPV) acquisition - the primary stage towards developing cervical cancer - along with other sexually transmitted infections (STIs) and HIV. The data that we report is part of a larger ongoing study investigating cultural drivers of HPV and cervical cancer risk perception among Haitian women, and explores traditional health practices commonly used by Haitian women for their gynecological health.

#### **Methods**

This qualitative descriptive study utilized convenience sampling from community-based centers in Little Haiti, Miami to recruit Haitian women who migrated within the last two years . Semi-structured in-depth interviews explored HPV and HIV awareness, disease perceptions , and cultural practices influencing health behaviors. Interviews were conducted in Haitian Creole and transcribed by hand. Atlas.ti software was used for thematic analysis, in which open codes were categorized into broader themes.

#### **Results**

A total of N=25 newly arrived Haitian migrants (18-45 years old) participated in the study. Most women voiced HIV as a primary disease of concern, and perceived HIV as a more severe condition than cervical cancer. All women reported intravaginal use of plants, herbs, or chemical products. Women used these products for varying reasons including after labor, during one's menstrual cycle, in the presence of symptoms of a vaginal infection, and to enhance men's pleasure. Women were less likely to present to medical facilities for gynecological care, and often used plants and herbs for their ailments. Women often started these practices after puberty prior to sexual debut.

## Conclusion(s)

Understanding Haitian women's cultural practices is critical in addressing sexual and reproductive health issues in this priority community. A better understanding of Haitian women's vaginal microbiome is needed to estimate the impact of these practices on women's STI and HIV risk.

Women's perspectives on HIV prevention: A qualitative study examining barriers and facilitators to PrEP care for women with problematic substance use

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# **Abstract Title**

Women's perspectives on HIV prevention: A qualitative study examining barriers and facilitators to PrEP care for women with problematic substance use

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# **Background**

Although new HIV diagnoses have declined each year since 2010, there have been no significant declines in the number of new annual HIV diagnoses among women since 2013. This is an indication that effective prevention strategies are not reaching all audiences. People with problematic substance use have increased susceptibility to HIV due to injection drug use, sex in exchange for money or drugs, and condomless sex while under the influence of alcohol and drugs. Women-focused Interventions are needed to decrease new HIV diagnoses within this population.

#### **Methods**

Trained doctoral-level interviewers conducted 25 in-depth semi-structured interviews with women in treatment for substance use disorders between June 2022 and March 2023. An interview guide based on IMB principles was used to illicit information on knowledge of and motivation to use HIV prevention methods including PrEP, perceptions of risk, preferred sources of health information, and feasibility of integrating PrEP care into addiction treatment settings. Data were coded and analyzed using MAXQDA 2022.

#### **Results**

Twenty-five interviews were conducted with women ages 26 to 70 (Mage=42 (11.03). The sample was racially/ethnically diverse (44%-Black, 44%-White, 12%-More than one Race, 24% Hispanic/Latinx. Participants reported limited knowledge and awareness of PrEP. Reasons for not being regularly tested for HIV or using PrEP included low perceived risk for HIV or not being offered these prevention tools by their health care providers. Women reported perceptions that PrEP was meant for others (e.g. men who have sex with men). They pointed to the implied target audience in advertisements as evidence for this belief and suggested making information about HIV prevention (including PrEP) more widely available starting at a younger age. Respondents were open to integrating HIV prevention and PrEP care into addiction treatment settings but expressed concerns about stigma related to both HIV and substance use.

# Conclusion(s)

Despite public health efforts, women are still not being provided adequate information on HIV prevention to help them to make informed decisions for their sexual health. HIV prevention advertising campaigns targeted towards women and their providers should be considered. More research is needed to determine effective strategies for integrating HIV prevention into multiple settings.

Intersectional social network support experiences, barriers, facilitators, and intervention opportunities among Black cisgender and transgender women living with HIV in the U.S. South

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#### **Abstract Title**

Intersectional social network support experiences, barriers, facilitators, and intervention opportunities among Black cisgender and transgender women living with HIV in the U.S. South

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# **Background**

Black cisgender and transgender women living with HIV (BWLH) in the US South bear the brunt of domestic HIV morbidity and mortality inequities among women. Social networks, defined as interconnected relationships, significantly impact health outcomes across the lifespan. Leveraging these networks can enhance health outcomes for BWLH by strengthening social support within their daily lives. However, interventions utilizing existing social networks in health and service promotion efforts among BWLH are lacking. This study aims to address knowledge gaps in the social and cultural context of BWLH's support experiences and opportunities for network-based interventions to improve HIV outcomes.

#### Methods

A purposive sampling strategy was employed to recruit 18 Black/African American women living with HIV in Georgia, including 6 cisgender, 7 transgender, and 5 with feminine/non-disclosed identities, for qualitative in-depth interviews. These interviews, lasting 60-90 minutes on average, explored their personal network support experiences, barriers, and facilitators. Thematic analyses of cultural, intrapersonal, and interpersonal factors shaping network support mobilization were conducted using an interdisciplinary symbolic interactionist and intersectionality lens.

# **Results**

There were complex intersections in support mobilization and access experiences among cis and trans women. Both groups reported belonging to disconnected networks offering various types of support, with trans women often having larger networks due to broader connections. Key themes emerged, including

(1) the superwoman schema and the negotiation of independence and role strain, (2) the role of maternal figures in facilitating support-seeking and acceptance, (3) the importance of multidimensional trust in brokering network support mobilization, and (4) the preference for informal online and community-driven peer support networks for tailored HIV-specific support with autonomy and discretion.

# Conclusion(s)

Study findings highlight culturally and socially interactive mechanisms influencing social network support mobilization among BWLH, with implications for syndemic stress, depression, and HIV care outcomes. Addressing factors like cultural self-schemas, gender-power dynamics, and trust-oriented relationships is crucial through individualized relationship-stress management and family-oriented support programs. Moreover, intergenerational maternal-oriented support and online/community-based peer network models show promise in promoting various health outcomes among BWLH across their lifespan. Further research can elucidate these mechanisms and lead to culturally relevant network-based strategies for advancing HIV equity among BWLH in the South.

# Developing a decision tool to help women choose between oral and long-acting injectable antiretroviral therapy (ART)

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#### **Abstract Title**

Developing a decision tool to help women choose between oral and long-acting injectable antiretroviral therapy (ART)

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# **Background**

Long-acting injectable antiretroviral therapy (LAI ART) provides an effective alternative to daily oral regimens for HIV treatment. Decision tools increase patient knowledge and decision-making power; this makes them particularly useful for female patients, who have been shown to value involvement in medical decision-making. No decision tools currently exist to facilitate shared decision-making between oral and

LAI ART for women with HIV and their treatment providers, and we know little about how providers perceive these tools.

## **Methods**

We conducted 38 in-depth interviews with HIV medical and social service providers across six U.S. cities between September 2021 and March 2022. We asked providers how an oral-LAI ART decision tool could be integrated into decision-making processes within their clinic. We recorded and transcribed interviews; thematic content analysis identified key findings.

#### **Results**

Some providers asserted that they would make the best decisions for patients and did not need a decision aid tool. Others indicated that they would use such tools, describing them as "an additional burden, but a worthy burden." Providers believed that decision tools saved time otherwise spent on patient education, helping them to "be more efficient"; others said that tools would help them "know what to ask" when questioning patients about structural barriers that may interfere with adherence. Only a minority of providers noted how decision tools could increase patient empowerment: "They would be able to advocate for themselves more".

# Conclusion(s)

As long-acting ART modalities are scaled up to advance HIV treatment and adherence, decision tools provide an opportunity to improve patient autonomy around ART modality choice and empower women living with HIV to engage in shared decision making with appropriate support. These tools must be carefully designed and implemented to encourage patient-provider dialogue and engagement in ART modality choice.

Willingness of young women to test and initiate post-exposure prophylaxis while seeking emergency contraceptive pills in pharmacies in Kenya

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# **Abstract Title**

Willingness of young women to test and initiate post-exposure prophylaxis while seeking emergency contraceptive pills in pharmacies in Kenya

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## **Background**

Adolescent girls and young women (AGYW) seeking emergency contraceptive pills (ECP) aim to prevent conception following unprotected sex. Condomless sex with persons of unknown HIV status also increases the risk of HIV acquisition. HIV screening is a vital step for prevention and treatment while post-exposure prophylaxis (PEP) is effective in lowering the risk of HIV acquisition after exposure. Pharmacies, where most AGYWs purchase ECP, can serve as convenient outreach points for HIV prevention services including PEP. We set out to assess the willingness of AGYW seeking ECP to test for HIV and initiate PEP in pharmacies.

#### Methods

We enrolled AGYW aged 15-24 from May to August 2023 seeking ECP in 4 participating pharmacies in Kisumu and Nairobi County, Kenya. We trained pharmacy providers on research ethics, documentation, screening, and consenting. Participants were surveyed via REDCap at two points; baseline and 10-day follow-up. Baseline data captured socio-demographics, use of ECP, HIV risk perception, HIV testing history, willingness to test for HIV, and willingness to initiate PEP; follow-up assessed whether participants had engaged in PEP or HIV testing. The pharmacy attendants informed on the option for a follow-up survey, issued participants with an information sheet on HIV testing and PEP services, and referred those interested to public health facilities. Data was summarized using frequency distribution, a measure of central tendency, and 95% confidence intervals.

#### **Results**

We screened 300 and enrolled 200 AGYW; mean age is 21.6 years; 47.8% are dating, 50.8% were single, 42.1% and 48.0% had secondary and post-secondary education, respectively. ECP use was high: 50.7% were first time users while 49.2 reported more than three times year. Perceived HIV risk was generally high with 42.4% reporting high risk, medium risk at 22.6%, with only 34.9% reporting low risk. 36.0% had gone for an HIV test three months before the study, and 17.3%, in six months, and 52.0% more than six months pre-study. A majority (95.6%) showed interest in pharmacy-based HIV testing; with 92.6% showing interest in initiating PEP alongside ECP use as they understood the connection between the 2 risks. On follow-up, (52, 68.4%), opted to purchase HIV self-test at the pharmacy and (19, 25.0%) linked to public hospitals for HIV testing and PEP. (74, 49.3%) didn't link for any services citing; (15, 20.3%) felt was not at risk, (8, 10.8%) fear knowing HIV status, (14, 18.9%) Did have time, (15, 20.3%) Still planning to go for testing.

## Conclusion(s)

The findings show that ECP users at pharmacies perceive themselves to be at risk for HIV and are interested in additional services. Enhancing the capacity of pharmacies to provide comprehensive HIV prevention services, including HIV testing and PEP initiation can significantly improve access to HIV services among at-risk AGYW.

# Survival outcomes of cervical cancer patients living with HIV and those not living with HIV in Western Kenya

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## **Abstract Title**

Survival outcomes of cervical cancer patients living with HIV and those not living with HIV in Western Kenya.

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# **Background**

Survival outcomes among cervical cancer patients living with HIV are still strikingly poor in regions reporting a high prevalence of cervical cancer and HIV. Although the effect of HIV on cervical cancer risk has been well understood globally, a limited number of studies have been conducted to understand its effects on the survival outcomes of cervical cancer patients, particularly in LMICs. This study assessed and compared the survival outcomes of cervical cancer patients who are living with HIV to those not living with HIV. We also assessed factors associated with differences in the survival outcomes of cervical cancer patients.

#### Methods

This retrospective cohort study was conducted at AMPATH among 631 cervical cancer patients diagnosed from 2011 to 2016. Secondary data were retrieved from patients' hospital files, CanReg5, and Microsoft Access database and used to generate a quantitative data set. Statistical analysis was conducted using RStudio. The Kaplan-Meier survival analysis was used to estimate the overall survival. The log-rank sum test was used to compare survival distribution between groups, and Cox proportional hazards regression was used to conduct univariate and multivariate regression analyses of the factors affecting survival.

## **Results**

The overall five-year survival estimate for cervical cancer patients was 36.40%. Age at diagnosis (p-value = 0.0003), health insurance (p-value = 0.00002), and education level (p-value = 0.005) were statistically associated with the overall survival of cervical cancer patients in the univariate analysis. However, only age at diagnosis (p = 0.0005) was significantly associated with survival in the multivariate analysis.

## Conclusion(s)

HIV status was not statistically significant in influencing the survival status of cervical cancer patients. However, HIV, and other covariates such as clinical stage, tumor grade, treatment, and other comorbidities may be clinically significant in influencing the survival of cervical cancer patients

Factors associated with retention in care among women living with HIV and those not living with HIV receiving treatment for cervical dysplasia in Western Kenya

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## **Abstract Title**

Factors associated with retention in care among women living with HIV and those not living with HIV receiving treatment for cervical dysplasia in Western Kenya.

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# **Background**

Women living with human immunodeficiency virus (HIV) have an elevated risk of cervical cancer as compared to women living without HIV. The risk of cervical cancer remains high in low and middle-income countries (LMICs) due to delays in seeking care and loss to follow-up after abnormal screening results. LMICs such as Kenya report about 41–69% of loss to follow-up for cervical dysplasia patients. To maximize the benefits of early detection and prompt treatment of precancerous lesions it is important to understand factors that affect follow-up among patients with abnormal screening results. This study explored the facilitators and barriers to engagement and retention in care among women diagnosed with cervical dysplasia at AMPATH, Western Kenya.

## **Methods**

This qualitative descriptive study was done among women who had abnormal cervical screening results on histology between 2019 and 2020. Convenience sampling was used to recruit 18 cervical dysplasia patients in care and 16 lost to follow-up. Patients were considered lost to follow-up if they were contacted and reminded of their follow-up appointment and did not go for their checkup within six months after any missed visit. In-depth interviews were conducted between June and August 2022. Data were managed using NVivo10 and analyzed using thematic analysis.

#### **Results**

Our study findings revealed that factors at multiple levels, such as individual patient characteristics (embarrassment and pain associated with the treatment and follow-up procedures, financial factors), interpersonal factors (social/family support), provider-patient relationships (gender of healthcare providers, communication and decision making by healthcare providers), and facility-level factors (patient reminder systems) affect adherence to follow-up among cervical dysplasia patients.

## Conclusion(s)

Understanding the healthcare environment and the various levels of influence in treating cervical dysplasia patients is crucial in developing multifaceted interventions to promote retention in care and thus reduce cervical cancer incidence in Kenya.

Use of HIV Prevention Strategies Reported by Black Women at Risk for and with HIV in the United States

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#### **Abstract Title**

Use of HIV Prevention Strategies Reported by Black Women at Risk for and with HIV in the United States

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# Background

Black/African American women are disproportionately affected by HIV. Understanding HIV prevention strategies used by Black women, including those with an increased risk of acquiring HIV and those with HIV, could help tailor status-neutral interventions designed to end the HIV epidemic. We analyzed data from two of the CDC's national HIV surveillance systems to examine HIV prevention strategies used by Black women with an increased risk of acquiring HIV and those with HIV.

#### **Methods**

Using 2018-2020 data on sexually active (defined as having anal or vaginal sex during the past 12 months) Black women with diagnosed HIV from the Medical Monitoring Project (MMP; N=967) and 2019 data on sexually active Black women without HIV from the National HIV Behavioral Surveillance (NHBS; N=4,033), we reported percentages of people who used various HIV prevention strategies.

#### **Results**

Among Black women with HIV, 58% had condom-protected sex, 56% reported having sex while having sustained viral suppression, 3% had condomless sex with a partner on pre-exposure prophylaxis (PrEP), and 24% had sex with a partner with HIV. Approximately 12% engaged in sex without using any HIV prevention strategy.

Among Black women without HIV, 39% were aware of PrEP; of these, 7% discussed PrEP with a healthcare provider, and 1% used PrEP in the past 12 months. Approximately 17% used a condom with their last sex partner, and 36% reported their last sex partner that did not have HIV.

## Conclusion(s)

Although many sexually active Black women with an increased risk of acquiring HIV and with HIV reported using HIV prevention strategies, there is room for improvement. Over 1 in 10 Black women with HIV reported not using any HIV prevention strategy, and >60% of Black women without HIV were not aware of PrEP. Continued and tailored efforts to increase the use of status-neutral HIV prevention strategies are essential for reaching goals related to ending the HIV epidemic in the US.

# Maternal Disclosure of HIV to Children HIV-Exposed Uninfected in the Botswana-Based FLOURISH Cohort

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#### **Abstract Title**

Maternal Disclosure of HIV to Children HIV-Exposed Uninfected in the Botswana-Based FLOURISH Cohort

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# **Background**

Maternal disclosure of HIV status to children, is recommended by the World Health Organization when children reach school age. Maternal disclosure of HIV status to children HIV-exposed in utero who remain uninfected is critical in order for the health and developmental consequences of this exposure to be measured as the adolescent advances into adulthood. We sought to understand timing and barriers of maternal disclosure to their adolescents HIV-exposed uninfected (HEU) in the Botswana-based FLOURISH cohort.

#### **Methods**

The FLOURISH study is an ongoing prospective longitudinal study recruiting women living with HIV and their children up to 17 years of age born HEU. At study entry, participants enrolling with children  $\geq$  10 years old self-report if they have disclosed their status to their child. If disclosure has not occurred, the participant is asked every three months about disclosure, intention to disclose, and current reasons for non-disclosure.

#### **Results**

Among 334 women enrolled in the study with a child  $\geq$  10 years of age, 42% had already disclosed at study enrollment. Disclosure to children  $\geq$  13 years old was more frequent compared to those < 13 years old (37% vs. 72% p<.0001). Disclosure did not vary significantly by whether the participant had disclosed to their partner (p=1.0) or child sex (p=0.92). Women without a college education were more likely to disclose (p = 0.06) and those with lower income were significantly more likely to disclose (p=0.004). Seven percent of women reported no intention to ever disclose. Over the course of the study, 28% of women intending to disclose have subsequently disclosed and 23% of women who initially indicated no intention to disclose have disclosed. The most common reason for nondisclosure was a sense that the child is too immature (86%).

# Conclusion(s)

In this high HIV prevalence setting where vertical HIV transmission is <2%, maternal disclosure is occurring but is not universal. Further research is needed to identify culturally appropriate guidance and interventions to support women living with HIV to disclose their status to their children and families, as this might improve their own mental health and allow for ongoing monitoring of the child's health into adulthood.

# Disparities in depressive symptoms and resilience among reproductive-age women with and without HIV in the STAR Cohort

Daniel Westreich, PhD

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# **Abstract 1 Title**

Disparities in depressive symptoms and resilience among reproductive-age women with and without HIV in the STAR Cohort

# **Abstract 1 Authors**

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# **Background**

Health disparities are common among women with or at risk for HIV in the United States. We investigated disparities in depressive symptoms and resilience by sociodemographic, clinical, and social factors.

#### Methods

Using baseline data from the Study of Treatment and Reproductive Outcomes (STAR) cohort, we described disparities in depressive symptom scores and resilience by race, HIV status, poverty, and stability of health care access at baseline among reproductive-aged women with or without HIV (WWH and WwoH, respectively), with a focus on WWH. We used structured interviews to collect sociodemographic information, and validated surveys to collect information on depressive symptoms (CES-D) and resilience (Smith). We stratified by HIV, race (Black, non-Black), poverty (≤\$1500/month vs. >\$1500/month), and healthcare access stability (unstable, stable). We compared mean differences for continuous variables and proportion differences for binary variables, with estimates and 95% confidence intervals (CIs) generated from linear models or chi-square tests.

#### Results

We studied 515 women in the STAR cohort who had baseline data collected by October 31, 2022. WWH had slightly higher levels of depressive symptoms than WwoH [difference in points] [1.4 (95% CI -0.7, 3.5)] and resilience [0.1 (-0.1, 0.2)] (p>0.05 for both). Among WWH, Black participants had higher levels of depressive symptoms [0.9 (-2.4, 4.3)] and resilience [0.1 (-0.1, 0.4)] than non-Black participants (p>0.05 for both). Among WWH, women in poverty had higher levels of depressive symptoms [4.7 (2.3, 7.2)] and lower levels of resilience [-0.3 (-0.5, -0.1)] than those not in poverty (p<0.05 for both). Finally, among WWH, those with unstable healthcare access had higher levels of depressive symptoms [6.5 (3.7, 9.4)] and lower levels of resilience [-0.3 (-0.5, -0.1)] than those with stable healthcare access (p<0.05 for both). There was minimal missingness (n<30) across all analyses.

## Conclusion(s)

Consideration of health disparities is a vital part of working towards health equity. We found here a suggestion that that among WWH, Black women, women in poverty, and women with unstable health care access all had higher levels of depressive symptoms. These findings, if confirmed after additional study, may help us identify particular groups that could benefit from additional intervention.

# Depressive Symptoms and Associated Factors among Reproductive Age Women in the Southern United States

# Daniel Westreich PhD

#### **Abstract 2 Title**

Depressive Symptoms and Associated Factors among Reproductive Age Women in the Southern United States

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# **Background**

Growing evidence shows that depression is a critical threat to the health and well-being of women living with HIV, with implications for both survival and reproductive health outcomes. In this work we explore the prevalence of depressive symptoms among women of reproductive age with and without HIV participating in the Study of Treatment And Reproductive outcomes (STAR) cohort.

#### Methods

We analyzed available cross-sectional data at baseline of women enrolled in STAR, an ongoing prospective observational cohort with a focus on reproductive and mental health. Enrollment for STAR began in March 2021. We used the Center for Epidemiologic Studies Depression Scale (CES-D) to measure depressive symptoms. Chi-square tests and crude odds ratios (cORs) were used to describe depressive symptoms by sociodemographic, substance use, psychological and reproductive characteristics.

# Results

Among 350 women with HIV (WWH, mean age 36) and 164 without HIV (WwoH, mean age 33) enrolled to date in STAR, the majority were Black (83% WWH, 74% WwoH) and 40% WWH and 35% WwoH reported a CES-D score  $\geq$  16 (henceforth "depressive symptoms"; WWH: median 12, IQR: 5-22 and WwoH: median

10, IQR: 6-21). Hazardous alcohol use (AUDIT score  $\geq$  8) was associated with increased odds of depressive symptoms overall cOR=1.94 (95% CI: 1.13-3.36) and did not differ by HIV status. Among all women, the odds of depressive symptoms rose with each point increase in self-reported loneliness (cOR=2.00, 95% CI: 1.75-2.29) and lack of neighborhood safety (cOR=1.10, 95% CI: 1.05-1.16); these were similar among WWH and WwoH. We found lower odds of depressive symptoms with increasing resilience score (cOR=0.80, 95% CI: 0.76-0.84 per point) and increasing social support score (cOR=0.91, 95% CI: 0.89-0.94 per point) among women overall, and among WWH and WwoH separately. Number of children, history of pregnancy, and substance use were not associated with odds of depressive symptoms.

# Conclusion(s)

Depressive symptoms are common among women of reproductive age with and without HIV. Future analyses will help to confirm these initial findings, and then begin to identify targets for intervention to alleviate depressive symptoms, especially among WWH where the symptom burden is higher.



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