

Research for Youth HIV / AIDS Prevention





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This booklet is produced by UCSF Center for AIDS Prevention Studies and UCSF Prevention Research Center Community Engagement Core. You might use it to:

- Stay up-to-date on our latest research
- Provide materials in trainings and presentations
- Advocate for services and funding
- Write grants
- Develop new or modify existing HIV prevention programs

The investigators are listed for each study. Contact us

Acronyms

NYHAAD: National Youth HIV/AIDS Awareness Day.

MSM: We use the acronym MSM to include all gay, same gender loving, bisexual and other men who have sex with men.

MSMW: We use the acronym MSMW to refer to all men who have sex with men and women. They may identify as gay, heterosexual/straight, bisexual, same gender loving, or prefer to use another term, or none at all.

Structural Racism

COVID-19

BEEM (Black Economic Equity Movement)

Investigators: Sheri A Lippman (MPI/UCSF); Marguerita Lightfoot (MPI/OHSU); Margaret Libby (MPI/MyPath); Emily Arnold (UCSF); Starley Shade (UCSF); Will Dow (UCB)

Black youth and young adults in the U.S. experience higher levels of poverty, illness, and discrimination than their white peers, with deep systemic social and structural inequities upending their safe and healthy transition to adulthood. The resulting health inequities are many: Black young adults experience high mental health service needs, but much less service utilization than their white peers, have higher rates of STI and less access to family planning. The goal of BEEM is to disrupt the social determinants of poverty and structural racism in order to have a transformative impact on a healthy transition into adulthood. The intervention will provide Black youth (ages 18-24) with a Guaranteed Income and provide access to financial coaching, peer-support, and referral services and to determine the impact of Guaranteed Income and financial services on financial well-being, mental health, and utilization of mental health and sexual and reproductive health services.

https://beemproject.org/



Partner Violence, And COVID-19 On HIV Care Engagement Among Young Black Sexual Minority Men With HIV In The US South

Investigators: (PI) Susan Kegeles (UCSF) (PI) Erik Storholm (Cal State Univ San Diego); (co-I) Daniel Siconolfi (Rand Corporation); (co-I) Chadwick Campbell (Cal State Univ San Diego); (co-I) Wilson Vincent (Temple University) (co-I) Lance Pollack (UCSF)

Among sexual minority men, young Black sexual minority men are the most disproportionately impacted by new HIV infections. Intimate partner violence (IPV) is one of the most understudied factors that may exacerbate these disparities. Both IPV and substance use leading to IPV may help explain poorer Continued Care (CC) engagement among YBSMM+ and are likely to be exacerbated by the COVID-19 pandemic, which is having devastating health and economic impacts.

This study uses structural equation modeling to explore the associations between substance use and IPV and their impact on HIV care engagement, viral suppression, condomless anal sex, and to determine if distinct forms of resilience (global resiliency, coping skills, and social support) buffer associations between these relationships among YBSMM+ in the U.S. South. This study will shed new light on the associations between substance use, IPV and CC outcomes and risk and subsequently aid in developing a resiliency and advocacy-based intervention that potentially reduces the impact of substance use and IPV on CC engagement and retention among YBSMM+.

COVID-19 Continued

PrEP

Young Adult Perspectives on Sex, Dating, and PrEP Use During the Pandemic and Improving the Future of PrEP Care

Investigators: Christina E. Camp, Carrie T. Chan, Parya Saberi

Few studies have researched young adults' experiences taking HIV pre-exposure prophylaxis (PrEP) after the start of California's COVID-19 shelter-in-place (SIP) orders. This study examined the experiences of young adults with sex, dating, and PrEP use during SIP and their perceptions on how to improve PrEP care in this age group. PrEP users ages 18-29 living in California between April 2020 and June 2021 completed a quantitative survey (N=37) and one-on-one qualitative interviews (N=18). Over half of survey participants reported trouble accessing PrEP care during SIP, citing difficulty obtaining medication refills, clinic appointments, and access to completing lab work. In qualitative interviews, participants expressed their preferences for more accessible PrEP service delivery across the PrEP care continuum. Despite pandemic SIP orders and trouble accessing PrEP services, young adults continued to engage in sexual behaviors.

To read the complete peer reviewed article click on the link https://link.springer.com/article/10.1007/s10461-022-03970-5

Connecting Resources for Rural and Urban Sexual Health CRRUSH-Sacramento

Investigators: Kimberly Koester, Janet Myers, Orlando Harris, Shana Hughes

In partnership with the Sacramento Zero Together Coalition, we are conducting research to increase PrEP uptake and decrease rates of sexually transmitted infections among men who have sex with men (MSM), particularly among racial and ethnic minority populations, in Sacramento County. New HIV diagnoses are highest among Latino and African American MSM between the ages of 13-44. PrEP coverage in Sacramento is substantially lower than coverage in nearby Alameda and San Francisco counties.

We plan to conduct a discreet choice experiment (DCE) to help us to identify which PrEP implementation strategies are most preferred by MSM. A DCE is designed to examine how people prioritize and make trade-offs among attributes or characteristics of a service or product. In this case, we will use the DCE method to understand what MSM want in a sexual health services program. The DCE will provide us with rigorously generated evidence or justification for selecting the implementation strategies we plan to ultimately test in a pilot study.

Study recruitment is underway. Results are expected to be forthcoming Fall 2023.

https://crrushstudy.ucsf.edu/

PrEPContinued

HIV Testing and Care Engagement

Texas PrEP Implementation Study

Investigators: Susan Kegeles, Greg Rebchook, Robert Williams, Scott Tebbetts, Andres Maiorana

Texas has high rates of HIV infection despite the availability of PrEP. Too few young Black and Latino men who have sex with men (YBLMSM) take PrEP, adhere to PrEP, and continue PrEP use over time. This study involved collaboration with two CBOs and an organization running multiple PrEP clinics throughout the state. The three organizations used Core Elements of the Mpowerment Project (MP) to implement PrEP enhanced activities for YBLMSM. The Mpowerment Project (MP) is an evidence-based, community-level intervention to facilitate the empowerment of young MSM and reduce HIV risk.

The goal of this project was to learn how organizations, including PrEP clinics, can successfully implement innovative activities to increase PrEP access, uptake and persistence by YBLMSM. We plan to share findings widely with PrEP clinics and MPs in Texas and throughout the US to help them successfully implement PrEP-enhanced MP activities.

http://mpowerment.org/



Perceptions of Risks and Benefits of Participating in HIV Cure-related Research among Diverse Youth and Young Adults Living with HIV in the United States

Investigators: Parya Saberi (PI), Karine Dubé, John Sauceda (co-I), Chad Campbell (Research Coordinator)

Researchers investigated attitudes toward participating in HIV cure-related research among a diverse national sample of young adults living with HIV (YLWH), using quantitative and qualitative approaches. They aimed to 1) explore the level of knowledge, interest, concerns, motivators, and deterrents of participating in HIV cure research among YLWH ages 18–29-year-old; 2) quantify willingness to participate in HIV cure research (addressing motivators and deterrents) and responses to real-world HIV cure research scenarios. They worked with a Youth Advisory Panel to help guide the research.

Study data provided essential information that can assist future researchers in the nuances of conducting HIV cure research with YLWH, informing them of recruitment strategies; guiding clinicians who wish to advise their patients about participation in HIV cure-related research; directing community leaders in community engagement methods; and allowing the voices of YLWH to be heard by the medical and research communities. 10 articles have been published as a result of this study.

https://youth4cure.ucsf.edu/

Published articles related to Youth4cure:

DOI: 10.1097/QAI.000000000003128, https://pubmed.ncbi.nlm.nih.gov/36913727/, DOI: 10.1089/AID.2022.0005, DOI: 10.1097/QAI.0000000000000335, DOI: 10.21037/mhealth-21-54, https://www.liebertpub.com/doi/ull/10.1089/aid.2021.0192, DOI: 10.1089/AID.2021.0149, DOI: 10.1080/09540121.2021.2001783, DOI: 10.1089/AID.2020.0268, DOI: 10.1097/QAI.0000000000003199

HIV Testing and Care Engagement

What does it mean to be youthfriendly? Results from qualitative interviews with health care providers and clinic staff serving youth and young adults living with HIV

Investigators: Parya Saberi, Kristin Ming, Carol Dawson-Rose

More research regarding youth living with HIV (YLWH) and tailoring of health care delivery to the unique and complex needs of this population is needed. Researchers conducted in-depth qualitative interviews with health care providers and staff members at clinics and organizations serving YLWH in the San Francisco Bay Area to examined facilitators of and barriers to engagement in care among YLWH at the system and provider/staff level, as well as the barriers to using technology-based forms of communication with YLWH to improve retention and engagement in care.

Various facilitators of and barriers to engagement in care among YLWH were noted: clinic location and service setting, flexible hours and use of technology, and nonjudgmental providers/staff. System-level challenges included the lack of technology use in organizations and clinics; provider/staff-level challenges included time constraints and familiarity with technology; and, youth-level challenges include changing of mobile telephone numbers and relationship with provider/staff. Results can provide guidance for clinics and institutions providing care for YLWH.

Food Insecurity and Unmet Needs Among Youth and Young Adults Living with HIV in the San Francisco Bay Area

Investigators: Christian Reeder, Torsten B. Neilands, Kartika Palar, Parya Saberi

CAPS faculty Parya Saberi and Torsten Neilands collaborated with Christian Reeder and Kartika Palar to examine food insecurity and unmet subsistence needs and their association with antiretroviral therapy adherence among youth and young adults living with HIV (YLWH).

Results from a cross-sectional survey of 101 YLWH (aged 18-29 years) found that approximately 51.7% of participants experienced at least one unmet subsistence need (difficulty finding enough to eat [36.6%], clothing [22.8%], place to sleep [21.8%], place to wash [17.8%], and bathroom [15.8%]), and 64.2% reported being food insecure. For every additional unmet need, the risk of very good/excellent adherence was reduced by 15% (RR = .85; 95% CI = .72-.99; p value = .04). The risk of very good/excellent adherence was lowered by 39% (RR = .61; 95% CI = .43-.87; p value = .005) among food insecure youth, compared with those who were food secure.



Technology And Prep

Technology

And Mental Health, Substance Use, Care Engagement

Comparing Mobile Health Strategies to Improve Preexposure Prophylaxis Use (PrEP) for HIV Prevention

Investigators: Al Liu, Janet Myers, Kim Koester

Al Liu, Janet Myers, and Kim Koester are comparing the effectiveness of two mobile health (mHealth) strategies (PrEPmate and DOT Diary) based on different theoretical models and using different intervention components to support PrEP adherence and continuation. Both strategies are proven to be promising but patients, providers, and health system administrators lack evidence for selecting which approach is most effective for supporting PrEP use in different patient populations.

The effectiveness of PrEPmate versus DOT Diary will be compared when implemented in diverse public health clinics and community health centers delivering a significant volume of PrEP to English and Spanish speaking African-American or Latinx MSM and TGW (ages 15 to 30), but with low and disparate levels of adherence and continuation. Study findings will provide information that will be useful to health care administrators, clinic directors, and patients in choosing optimal strategies to reduce disparities in HIV prevention outcomes.

Study recruitment is underway. Results are expected to be forthcoming in late 2023/early 2024.

Video-Counseling Intervention to Address HIV Care Engagement, Mental Health, and Substance Use Challenges: A Pilot Randomized Clinical Trial for Youth and Young Adults Living with HIV

Investigators: Parya Saberi, Caravella McCuistian, Emily Agnew, Angie R. Wootton, Dominique A. Legnitto Packard, Carol Dawson-Rose, Mallory O. Johnson, Valerie A. Gruber, and Torsten B. Neilands

Substance use (SU) and mental health (MH) hinder engagement in care and antiretroviral therapy (ART) adherence among youth and young adults living with HIV (YLWH) and potentially lead to increased HIV transmission and a future generation of immunodeficient adults with drugresistant virus. Parya Saberi and colleagues implemented the Youth to Telehealth and Texting for Engagement in Care (Y2TEC) study to examine the feasibility and acceptability of a novel video-counseling series and accompanying text messages, designed to identify and address barriers to HIV care, and MH and SU challenges.

Fifty YLWH aged 18–29 enrolled and completed 455 (76%) video-counseling sessions; quantitative surveys were used to evaluate Y2TEC's feasibility and acceptability at baseline and at 4 months (86% retained) and 8 months (75% retained). Y2TEC was feasible and acceptable with participants reporting high satisfaction with video counseling sessions (81-82%) and, at 4 months, slightly higher ART adherence and HIV knowledge, decreased depression and anxiety, and reduced stigma related to mental health and substance use.

Technology And Care Engagement

WYZ: A Mobile Health Application for Engagement in Care among Youth Living with HIV

Investigators: Parya Saberi (PI), Theodore Ruel (co-I), Torsten Neilands (co-I), Mallory Johnson (co-I), Xavier Erguera (Research Coordinator)

In the US, fewer than 6% of all youth living with HIV (YLWH) achieve HIV viral suppression. This health disparity extends to the entire HIV care continuum in that there is a strong association between younger age and later HIV diagnosis, lower engagement in care, lower levels of antiretroviral therapy (ART) adherence, and worse HIV clinical outcomes. In response to this critical public health dilemma, our research team proposed to develop a novel mobile health app to improve engagement in health care and ART adherence and to pilot test this mobile health app in 18-29-year-old YLWH. We conducted a pilot trial to assess the feasibility, acceptability, and preliminary clinical impact of the use of an app called WYZ (pronounced "wise") among YLWH and their healthcare providers. We worked with a Youth Advisory Panel to help guide the research. 3 articles have been published as a result of this study.

https://wyz.ucsf.edu/

Published articles related to WYZ:

DOI: 10.2196/26861

DOI: 10.3390/ijerph18084170

DOI: 10.1136/bmjopen-2019-030473

Intervention to Improve Virologic Suppression Among Youth (iVY)

Investigators: Parya Saberi, Tor Neilands (co-l), Valerie Gruber (co-l), Caravella McCuistian (co-l), and Mallory Johnson (co-l), Kristin Ming (Clinical Research Supervisor), Louis Smith (Research Coordinator), Celeste Balaban (Study Counselor)

In the US, youth and young adults living with HIV (YLWH) experience poorer treatment and care outcomes compared to older age groups. Additionally, there is an increased risk of substance use (SU) dependence, mental health (MH) disorders, and mortality with increased risk of SU at a younger age. MH and SU impact every step of the HIV care continuum from diagnosis to viral suppression and exacerbate socioeconomic challenges of linkage and sustained access to healthcare. Given the strong evidence for the influence of MH and SU on poor HIV health outcomes, and the need to address these conditions in YLWH, there is a severe shortage of MH professionals nationwide.

In collaboration with the nonprofit AIDS Healthcare Foundation and a Youth Advisory Panel, the proposed study aims to address these barriers in a tailored manner using a differentiated care approach that is "youth-friendly." Our goal is to test the effect of a tailored technology-based intervention in a randomized clinical trial (RCT) with an adaptive treatment strategy (ATS) among 300 YLWH (18-29 years old). Through this entirely remotely-conducted study, we will: (1) Test the efficacy of video-counseling+app vs standard of care on virologic suppression in YLWH by comparing HIV virologic suppression of those randomized to the intervention vs control arms at 16 weeks via a RCT. (2) Assess the impact of video-counseling+app vs standard of care on MH and SU in YLWH by evaluating the MH and SU differences between the intervention vs control arms at 16 weeks via a RCT. (3) Explore an ATS to individualize the intervention by assigning the: (a) virologic "non-responders" in the intervention arm to intensified video-counseling+app for 16 more weeks, (b) virologic "responders" in the intervention arm to continue only app use for 16 more weeks.

https://ivy.ucsf.edu/ (site under construction)

Technology

And Care Engagement Continued

Y2TEC: Youth to Text or Telehealth for Engagement

in HIV Care

Investigators: Parya Saberi (co-PI), Carol Dawson-Rose (co-PI), Valerie Gruber (co-I), Torsten Neilands (co-I), Dominique Legnitto (Research Coordinator), Caravella McCuistian (Research Fellow), Angie Wooten (Study Social Worker)

Youth and young adults living with HIV (YLWH), 18-29 years old, have poorer health than older adults living with HIV. There are many reasons for this including a lack of youth-friendly healthcare settings. In addition, some youth may not be involved in their healthcare or taking HIV medications regularly because of their substance use (SU). We proposed a study to determine if using technology (videoconferencing and text messaging) to provide healthcare and counseling can result in better and more welcoming healthcare services for YLWH. We also examined whether these forms of technology may be useful methods to address mental health (MH) challenges and SU for YLWH.

We conducted 17 qualitative interviews with clinicians/ staff from 8 different clinics/organizations serving YLWH in San Francisco and Oakland that showed system-level (e.g., availability of technology and clinic capacity), provider/staff-level (e.g., privacy and comfort with use), and youth-level (e.g., changing phone numbers and relationship with provider) barriers to technology use. Our pilot wait-list control randomized trial examined the feasibility and acceptability of a video-conferencing-based intervention to address MH, SU, and HIV care engagement among YLWH. The intervention consisted of 12 brief sessions with the study counselor and included text messaging to provide resources, check-ins, and appointment reminders to participants. 6 articles have been published as a result of this study.

https://y2tec.ucsf.edu/

Technology

And Ending the HIV Epidemic

Youth Ending the HIV Epidemic – Automated Directly Observed Therapy Pilot: Improving HIV Care Among Youth

Investigators: Parya Saberi, Kristin Ming (Clinical Research Supervisor), Louis Smith (Research Coordinator)

In the US suboptimal virologic suppression and retention in care among youth and young adults living with HIV (YLWH) increases the risk of HIV transmission and a future generation of immunodeficient adults. Our research will pilot test an innovative intervention to improve HIV virologic suppression in 18- to 29-year-old YLWH.

We build on existing evidence and interventions that show the benefit of directly observed therapy (DOT) and conditional economic incentives (CEIs) in increasing ART adherence and viral suppression in people living with HIV by proposing to pilot test a novel combined automated DOT and CEI (aDOT-CEI) intervention via a mobile health app that uses artificial intelligence and facial recognition to monitor and support ART adherence.

We aim to 1) assess the feasibility and acceptability of aDOT-CEI among 30 YLWH (aged 18 to 29) who have an unsuppressed HIV viral load and 2) assess experiences of 10 YLWH using the aDOT-CEI intervention and 10 staff/providers from participating AIDS Healthcare Foundation (AHF) clinics to explore intervention experiences, potential influences on ART adherence, individual-level and clinic-level barriers and facilitators to intervention implementation, and suggested refinements for a future efficacy trial.

Our study has the potential to improve ART adherence and HIV virologic suppression among YLWH to reduce onward HIV transmission and age-related health disparities.

https://yehe.ucsf.edu/ (site under construction)

International

In Our Own Words: Peer-to-Peer Messaging to Increase Uptake of HIV Prevention Strategies among Adolescents in Kenya

Investigators: Hong-Ha Truong

In Kenya, the 2014 Demographic Health Survey revealed low levels of HIV knowledge and high levels of risk behavior among adolescent girls aged 15-19 years, generating a need to create a narrative that reflects what is salient to this population. Hong-Ha Truong and colleagues propose to leverage the cultural importance of role play and live theater in Kenya to inform the development of public service announcement (PSA) creation workshops for adolescent girls in Kisumu County to increase HIV knowledge and decrease risk behaviors among their peers.

The mixed-methods approach 1) elicits adolescents' narratives regarding sexual health and HIV prevention, as voiced to peers; 2) characterizes determinants shaping adolescents' mental and behavioral HIV prevention models; and 3) assesses the feasibility and acceptability of HIV prevention PSA creation workshops, with the intent of integrating with existing HIV prevention programs and synergizing with the planned roll-out of PrEP in the study region. Narratives will potentially be used to improve engagement with prevention messages by their peers, which can enhance the uptake of future combination bio-behavioral interventions.

Addressing the Continuum of Care and Prevention among High-Risk Thai Men

Investigators: Susan Kegeles, Scott Tebbetts

The HIV epidemic in Thailand is escalating among young men who have sex with men (YMSM). Given suboptimal uptake of HIV testing and treatment services among YMSM, there are tremendous challenges in much needed prevention efforts to improve linkage to care and achieve individual and community viral suppression to prevent onward HIV transmission. Based on a cultural adaptation of the evidencebased Mpowerment intervention, Susan Kegeles and colleagues developed and piloted HUG-M, a multi-level, theory-based intervention that diffuses social support and empowers the YMSM community in order to establish social norms supportive of risk reduction and biannual HIV testing.

The project aims to (1) expand HUG-M to HUG-M+, a comprehensive, integrated, combination intervention that focuses on the entire Continuum of Prevention and Care, by adapting HUG-M to address YMSM living with HIV, and combining it with a Health System Intervention, (2) implement HUG-M+ for 2 years in collaboration with the Thailand Ministry of Public Health (MOPH) clinics, and (3) evaluate the efficacy of HUG-M+ in decreasing sexual risk behavior or using PrEP; increasing HIV testing; and increasing prompt, sustained engagement in care.

http://mpowerment.org/



Additional Resources

Resources and Guidance Related to HIV and COVID-19

VIDEO. Integrated HIV Prevention and Mental Health Service Delivery among Young South African Women with Jennifer Velloza Ph.D., MPH



Fact Sheets

- What is the role of the family in HIV prevention?
- What works best in sex and HIV education?
- See our complete list of Fact Sheets

Intervention Curricula

- The Mpowerment Project for young adult African American and Latino men
- Project Style <u>Services developed to engage and retain men of color living with HV in high-quality care</u>.

Survey Instruments and Scales- <u>Topics include counseling and testing, healthcare providers, risk behavior, adherence, coping, substance use and knowledge/attitudes</u>.

Transgender Resources - <u>The HIV Testing Toolkit, Transgender Health Factsheets and</u> Recommendations for Inclusive Data Collection of Transgender People in HIV Prevention.

UCSF Anti-Racism Initiative

https://diversity.ucsf.edu/antiracism-initiative





CAPS | PRC Mission Hall 550 16th Street, 3rd Floor San Francisco, CA 94143 UCSF Box 0886

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