

AUTHORS

Sid P. Jordan, JD

Kirsty A. Clark, MPH

Jaden Fields

Ezak Perez, Executive Director of Gender Justice LA

Ayako Miyashita, JD

Ian W. Holloway, PhD, MSW, MPH

FUNDERS

This study was conducted collaboratively with the City of Los Angeles AIDS Coordinator's Office and Gender Justice Los Angeles. The study received support from the California HIV/AIDS Research Program through a grant to the Southern California HIV/AIDS Policy Research Center (Grant Number RP15-LA-007).

ACKNOWLEDGMENTS

We would like to thank more than 40 anonymous community stakeholders who contributed to survey design, outreach and recruitment efforts, and who helped to shape the policy recommendations reflected in this report. We would also like to thank our following colleagues for their invaluable contributions to this study: Dahlia Ferlito, AJ King, Jovan Wolf, Dr. Bianca D.M. Wilson, and Dr. Carrie Lippy.

ABOUT THE CALIFORNIA HIV/AIDS POLICY RESEARCH CENTERS

The California HIV/AIDS Policy Research Centers are funded by the California HIV/AIDS Research Program to bring the most relevant and timely evidence to bear on HIV/AIDS policy making in order to further California's efforts to develop and maintain efficient, cost-effective, and accessible programs and services to people with or at risk for HIV/AIDS.

CITATION

Jordan, S.P., Clark, K.A., Fields, J., Perez, E., Miyashita, A. & Holloway, I.W. (2018) HIV Prevention Strategies for Transmasculine People in California [<http://www.chprc.org/wp-content/uploads/2018/04/TMHIVPrevention.pdf>]



This study was supported by:



NEXT-LEVEL CONSULTING

EXECUTIVE SUMMARY

INTRODUCTION

Transgender men and others on the transmasculine spectrum have been largely excluded from HIV prevention research, policy, and practice. Recent studies indicate that their unmet sexual health needs may contribute to health inequities and that HIV infection rates among transmasculine people may be higher than previously reported. The Transmasculine Sexual Health and Reproductive Justice Research Study was part of a community-based participatory research project that engaged diverse transmasculine people and their healthcare providers to better understand their health needs, concerns, and priorities, including factors related to HIV prevention.

METHODS

An online survey was conducted for six weeks in July and August 2017. Eligible participants were: 18 and older; assigned female on their original birth certificate; identified as a transgender man, on the transmasculine spectrum, or gender non-conforming (broadly defined); and lived, worked, or received health care services in Los Angeles County (LAC). Participants were recruited through print and online promotion, including venue and event-based outreach, viral messaging, and paid banner advertisements on social media platforms. This report focuses on descriptive and bivariate findings related to HIV and sexually transmitted infections (STI) including sexual partners and networks, HIV and STI testing, access to and uptake of pre-exposure prophylaxis (PrEP), safer sex information and consent, and barriers to seeking healthcare.

SAMPLE

The 309 participants ranged in age from 18- to 67-years-old with a mean age of 29.7 (SD 7.84). More than a quarter were young adults ages 18- to- 24 (27%). Nearly one-third earned below the 2017 federal poverty level (32.0%) and the majority earned less than \$60,000 annually (85.7%) (under the LAC 2017 mean income of \$64,500). More than half (52%) had a four-year college degree. Participants reported their racial/ethnic identities as: American Indian (1.0%), Asian / Pacific Islander / Native Hawaiian (13.3%); Black / African-American (6.1%); Latinx / Hispanx / Chicanx (16.8%); Middle Eastern / North African (1.5%); or white (42.7%); one-fifth identified as biracial / multiracial / mixed or selected multiple racial/ethnic categories (20.1%).

Participants selected multiple terms to describe their gender identity, with the most common terms being transgender (70.6%), trans (68.3%), transmasculine (53.4%), trans man (48.5%), FTM (44.3%), non-binary (40.5%), man or male (36.9%), genderqueer (32.4%) and gender non-conforming (32.4%). Of those with a current state identification document (96.8%), 39.8% were listed as “male” and 60.2% were listed as “female.” Most also selected multiple terms to describe their sexual orientation with more than two-thirds selecting queer (69.8%). Other common terms included pansexual (23.9%), gay (15.6%), bisexual (15.3%) and straight/heterosexual (14.6%).

RESULTS

No participants reported being HIV positive. Among participants who had been tested for HIV (86.4%), nearly all tested negative (97.4%) and the remaining did not know the results of their last test (2.6%). Of those that had been tested for STIs (85.1%), 10.4% had been diagnosed with a bacterial infection (e.g. chlamydia, gonorrhea, syphilis) in their lifetime and 3.0% were diagnosed with a bacterial STI in the past year.

Sexual Partners & Networks: About a quarter of participants had met a sexual partner in the past six months using a website or “hook-up app” (26.3%) and half maintained a profile (50.0%). The most common websites and apps used to find sexual partners were OkCupid, Tinder, Grindr, Scruff, and craigslist. Participants who reported having a sexual partner in the past six months (n=229) indicated that one or more partner was a cisgender woman (63.8%), a cisgender man (33.0%), a trans man / on the transmasculine spectrum (19.6%), a trans woman / on the transfeminine spectrum (12.2%) or a person that was gender non-conforming or two spirit (29.3%).

HIV/STI Testing: More than 1 in 10 had never been tested for HIV (13.6%) or sexually transmitted infections (14.9%). About 54.2% of participants had been tested for HIV in the past year and the majority were tested by a primary care provider (57.5%).

Access & Uptake of PrEP: Of all participants, 79.9% of participants had heard of PrEP prior to taking the survey, about 39.2% of participants knew of a provider that they could ask for a PrEP prescription, and 4.5% had been prescribed PrEP. **We found that about one-fifth of participants were at sufficient risk of acquiring HIV for a provider to recommend PrEP (19.1%).** A greater percentage of participants who knew a provider to ask about PrEP were white; between the ages of 25 – 39; had state identification that read “male” (instead of “female”); and had a primary care provider (PCP) that specializes in transgender healthcare compared to those who did not know a provider that they could ask for a PrEP prescription.

Safer Sex Knowledge and Partner communication: The majority felt informed about how to have safer sex (62.8%), were confident in negotiating safer sex with their sexual partners(s) (57.1%), and had agreed on how to practice safer sex with their current sexual partner(s) (54.9%). More than one-third did not feel informed about how to have safer sex (37.2%) or confident negotiating safer sex with their sexual partner(s) (42.9%). Nearly half had not agreed on how to practice safer sex with their current sexual partner(s) (45.1%).

Sexual Violence: Nearly two-thirds of respondents had experienced unwanted sexual contact in their lifetime (65.7%) and 11.3% had experienced unwanted sexual contact in the past year. Of respondents who had experienced unwanted sexual contact in the past year (n=34), 11.8% had also been diagnosed with an STI in the past year, compared to just 1.7% of participants who had not experienced unwanted sexual contact.

Barriers to Accessing Healthcare: The majority of participants had some form of health insurance (90.3%), while 8.4% were not insured and 1.3% were unsure. The most common reasons participants had delayed seeking medical care in the past twelve months included: “depression / lack of motivation” (51.5%), “costs / lack of money” (49.8%), “anxiety/trauma related to previously health care experiences” (48.5%), and “concern about mistreatment based on gender identity or expression” (45.0%).

RECOMMENDATIONS

The findings from this study highlight the importance of gender and sexual diversity in comprehensive HIV prevention planning. Transmasculine people both *belong to* and *sexually partner with* groups that are highly prioritized in HIV prevention planning (e.g. gay and bisexual men, trans women); yet they are rarely named explicitly and are sometimes actively excluded. These forms of exclusion can compound existing concerns and anxieties about mistreatment in healthcare settings and may contribute to delays in seeking care. This study indicates that a multidimensional approach to gender and sexual diversity and HIV prevention are needed. Strategies must account for factors that may prevent transmasculine people from accessing healthcare, including gender discrimination, racism, poverty, depression, sexual violence, and trauma related to past healthcare experiences.

Ensure that community-based HIV prevention services are accessible to transmasculine people: Community-based services provide crucial access points for HIV and STI testing, sexual health

education, and biomedical prevention options such as PrEP, particularly for those who cannot afford or distrust medical providers. Dedicated HIV prevention funding streams should be revised to ensure that transmasculine people are not explicitly excluded from accessing existing services and that providers are appropriately trained to provide affirming services.

Integrate gender diversity into HIV prevention services and publicly available sexual health

literature: Including transmasculine people in HIV prevention efforts requires rethinking some of the basic assumptions about the relationship between gender and risk that are currently embedded in policy and practice. Efforts to reach transmasculine people with HIV prevention messaging and services should include targeted efforts designed by and for transmasculine people, as well as diversification of mainstream literature and programming to include a broader range of bodies, identities, and sexual partnering.

Create durable funding streams for primary care services that specialize in transgender health:

Given the barriers to care identified by participants in this study, primary care sites that specialize in transgender health care may serve as a current frontline in HIV prevention for transmasculine people. Such services may ensure a greater likelihood that transmasculine people will remain engaged in care and present increased opportunities for providers to issue targeted and trauma-informed HIV prevention education and services.

Coordinate community-based sexual violence prevention and survivor advocacy with HIV

prevention efforts: Participants reported experiencing unwanted sexual contact during their lifetimes and in the past year at rates that far exceed general population estimates. Such findings underscore a need for coordination between community-driven sexual violence prevention, survivor advocacy, and trauma-informed services as essential components to a comprehensive HIV prevention strategy for transmasculine people in California.

Improve accuracy of data collection and reporting: Mechanisms must be updated to adequately capture and track HIV-related service utilization among transmasculine people, as well as those with non-binary or non-conforming gender identities. Accurate data collection will require that record-keeping systems are updated and that providers are adequately trained and equipped to collect and protect gender-related data across diverse gender identities and experiences.

FULL REPORT

INTRODUCTION

Transgender men and others on the transmasculine spectrum (“transmasculine”) have been largely excluded from HIV prevention research, policy, and practice.¹ HIV prevention strategies often conflate concepts of gender with anatomies and anticipate health risks accordingly.^[1,2] Research practices and standards of care that are designed based on this binary view of sex/gender are often inadequate for understanding and addressing the health needs of transgender people. Prevention efforts that have been tailored for transgender people have generally focused on transgender women and may be irrelevant or inaccessible for transmasculine people.

Rates of HIV infection among transmasculine people are unknown.¹ A recent study estimated that that 1 in 10 transgender adults living with HIV in the United States is transmasculine.^[3] This constitutes a significantly larger proportion than previously documented and further warrants attention toward factors relevant to HIV prevention. Previous studies have indicated that the overlooked and unmet sexual health needs of transmasculine people, including a lack of relevant public health information, misinformation among healthcare providers, and barriers to accessing HIV/STI testing may contribute to HIV risk and prevent early detection.^[4]

The *Transmasculine Sexual Health and Reproductive Justice Research Study* was part of a community-based participatory research project led in partnership with the City of Los Angeles AIDS Coordinator’s Office, Gender Justice LA, and researchers at the University of California Los Angeles. The project was generated by and for transmasculine people to better understand the health needs, concerns, and priorities, including HIV prevention.

METHODS

An online survey was conducted for 6 weeks in July-August 2017. Eligibility criteria included that participants were: 1) 18 and older; 2) assigned female on their original birth certificate; 3) identified as a transgender man, on the transmasculine spectrum, and/or gender non-conforming (broadly defined); and 4) lived, worked, or received health care services in Los Angeles County. Survey questions were developed through a community stakeholder process in which transmasculine people engaged in identifying the themes and scope of inquiry, defined survey items, and engaged in survey testing. The majority of transmasculine stakeholders who participated in this process were low-income people of color.

Recruitment materials were distributed online and in print. Promotional materials included language to signal that the term “transmasculine” was broadly defined to include those with a range of non-binary or gender non-conforming identities and experiences. The survey was available online and in English only, due to budgetary constraints. Participants were recruited using community-driven viral marketing on social media, targeted paid advertisements (Instagram, Facebook, Twitter) and banner ads (Scruff), and print materials (posters and cards) distributed to LGBT community centers, social and political organizations, and college campuses across LAC. Targeted event outreach was also conducted. Prospective participants were directed to a standalone website that included information about the study and a direct link to the survey using Qualtrics Research Suite.^[5]

This report focuses on descriptive findings related to HIV prevention including: HIV and sexually transmitted infection (STI) testing and outcomes; risk of sexual transmission of HIV; safer sex information; partner communication and consent; awareness and uptake of pre-exposure prophylaxis (PrEP); and general barriers to accessing healthcare. Bivariate comparisons were also used to explore associations between socio-demographic factors and access to PrEP, as one indicator of inequities in access to biomedical HIV prevention strategies. Chi-square tests were also used to examine associations between

experiencing sexual violence in the past year and bacterial STIs in the past year, based on preliminary evidence about the associations between sexual violence and STIs.^[6] All analyses were conducted using SPSS v. 24, STATA v.15 and Rstudio v.1.0.136.

Text quotations shared in this report are responses to the open-ended text-based question: “What are some key things that you think health providers should know when working with transmasculine people related to sexual or reproductive health?” Text responses were selected to illustrate key themes and used to contextualize quantitative data findings.

SAMPLE

The final sample included 309 transmasculine respondents. The vast majority lived or worked in Los Angeles County (LAC) (96.1%) with the remaining who traveled to LAC for health care services (3.9%). They ranged in age from 18- to 67-years-old with a mean age of 29.7 years-old (SD 7.85). More than a quarter (27%) were young adults between the ages of 18 and 24.

Participants reported their racial/ethnic identities as: American Indian (1.0%), Asian / Pacific Islander / Native Hawaiian (13.3%); Black / African-American (6.1%); Latinx / Hispanx / Chicax (16.8%); Middle Eastern /North African (1.5%); or white (42.7%); one-fifth identified as “biracial / multiracial / mixed” and/or selected multiple racial/ethnic categories (20.1%). More than a quarter of the overall sample were Latinx / Hispanx / Chicax (26.8%), including those who selected multiple categories. Of all participants, fourteen percent (14.0%) were immigrants to the United States.

More than half (52%) had a four-year college degree or higher; 38% had some college or vocational training; and about 9% had a high school diploma, GED, or less education. Nearly one-third earned below the 2017 federal poverty level (32.0%) and the majority earned less than \$60,000 annually (85.7%), under the LAC mean annual income in 2017 of \$64,500. More than one-fifth (21.9%) of respondents indicated having been homeless in their lifetime, including 3.3% who were currently homeless. Fewer than half of the respondents (42%) were employed full-time. About one-third of participants (33%) indicated that they had a disability of any kind [Table 1].

Gender Diversity: Participants were asked about their gender identity using a multiple selection option. The most common terms selected were transgender (70.6%), trans (68.3%), transmasculine (53.4%), trans man (48.5%), FTM (44.3%), non-binary (40.5%), man or male (36.9%), genderqueer (32.4%) and gender non-conforming (32.4%). Many selected other terms such as: two spirit, third gender, transsexual, stud and intersex, or wrote in additional terms, such as boi, agender, gender non-compliant, and man of trans experience. Overall, 48 different gender identity terms were reported.

Participants were asked about certain forms of gender-affirming healthcare that may influence sexual health needs; 72.5% had testosterone therapy at some point in the lifetime, 9.5% had a hysterectomy and 1.6% had genital reconstructive surgery (“bottom surgery”). Participants were also asked about their gender marker on their driver license or state identification card (ID) in order to examine any associations between IDs and access to healthcare. Of those with a current ID (96.8%), 60.2% were listed as “female” and 39.8% were listed as “male.”

Sexual Diversity: Participants were offered multiple selection of 8 pre-coded terms and a write-in box for describing their sexual orientation. More than one-third only selected queer (36.0%), while 11% selected “straight/heterosexual” only 4.3% selected “gay” only, 3.7% selected “pansexual” only, and 3.3% selected “bisexual” only. One-third checked multiple boxes (which also included asexual, lesbian, and same gender loving) (37.3%). The most common term endorsed by more than two-thirds of participants was queer (69.8%). Additional write-in responses included: demisexual, greysexual, grey-ace, transsensual, queer heterosexual, lesbiqueer, “mostly into dudes,” “I love everyone!” and “I don’t even know at this point anymore.”

Table 1: Characteristics of the respondents

		% (n) or Mean (SD)
AGE	Mean Age	29.7 (7.85)
AGE GROUP	18- 24 years-old (“Young adults”)	27.0% (84)
	25- 29 years-old	30.1% (93)
	30- 34 years-old	19.4% (60)
	35- 39 years-old	14.5% (45)
	40-49 years-old	5.8% (18)
	50 years-old and older	2.9% (9)
RACE/ ETHNICITY	Biracial/ Multiracial / Mixed	20.1% (62)
	African American / Black only	6.1% (19)
	American Indian / Native only	1.0% (3)
	Asian / Native Hawaiian / Pacific Islander only	11.3% (35)
	Latinx / Latino / Hispanic only	16.8% (52)
	Middle Eastern / North African only	1.5% (5)
	White only	42.7% (132)
	Prefer not to say	.3% (1)
IMMIGRANT (n=301)	Immigrant to the U.S.	14.0% (42)
	Not an immigrant to the U.S.	86.0% (259)
EDUCATION (n=308)	High school/GED or less	9.1% (28)
	Some college or vocational training	38.3% (118)
	Four-year degree or higher	52.6% (162)
ANNUAL INCOME (n=300)	Under \$12,000	32.0% (96)
	\$12,000 - 35,999	36.7% (110)
	\$36,000 - 59,999	17.0% (51)
	\$60,000 or more	14.3% (43)
HOUSING (n=301)	Currently homeless or in transitional housing	3.3% (10)
	History of homelessness	18.6% (56)
	No history of homelessness	78.1% (235)
DISABILITY (n=301)	Identifies as having a disability	33.6% (101)
	Does not identify as having a disability	66.4% (200)

RESULTS

No respondents reported that they were living with HIV. Forty-two participants (13.6%) had never been tested for HIV. Of those that had been tested for HIV (86.4%), almost all reported that their most recent HIV test was negative (97.4%) and others reported that they did not know the results of their most recent test (2.6%). Of those that had been tested for STIs (85.1%), 10.4% had been diagnosed with a bacterial STI (e.g. chlamydia, gonorrhea, syphilis) in their lifetime and 3.0% reported a diagnosed bacterial STI in the past year.

SEXUAL PARTNERS & NETWORKS

Participants were asked if they had “maintained a profile on any dating websites or “hook-up apps” in the past six months. Of those responding, exactly half responded yes (50.0%). Of those respondents who maintained a profile (n=152), just over half had met a sexual partner in the past six months through using a website or hook-up app (52.6%). The five most common websites and apps used to find sexual partners were OkCupid, Tinder, Grindr, Scruff, and craigslist.

Participants were asked about the gender of their sexual partner(s) in their lifetime and in the past six months using six pre-coded categories and a write-in option. Participants reported significant variety in the gender identities of their sexual partners. The majority reported having at least one sexual partner in their lifetime that was “a woman who was not transgender (cisgender woman)” (88.1%); “a man who was not transgender (cisgender man)” (65.0%); or a person that was transgender, “non-binary / gender non-conforming / genderqueer” or “two spirit” (61.5%). Of those who reported having a sexual partner in the past six months (n=299), most described having at least one partner that was a cisgender woman (63.8%). One third had a partner that was a cisgender man (33.0%). Many also had a sexual partner that was a trans man / on the transmasculine spectrum (19.6%), a trans woman / on the transfeminine spectrum (12.2%) or a person that was gender non-conforming or two spirit (29.3%). Participants’ descriptions of sexual partner(s) by gender over the lifetime and in the past six months are presented in Table 2.

“Don’t assume what our sex life looks like or who it’s with.”

Table 2: Gender diversity of sexual partners among transmasculine survey participants

		ANY %/n	ONLY % (n)
LIFETIME PARTNERS (n=294)	cisgender women	88.1% (259)	19.0% (56)
	trans women / transfeminine spectrum	22.1% (65)	0.0% (0)
	cisgender men	65.0% (191)	4.4% (13)
	trans men / transmasculine spectrum	37.4% (110)	< 1% (1)
	gender non-conforming or two spirit	53.7% (158)	3.1% (9)
PARTNERS IN THE PAST 6 MONTHS (n=229)	cisgender women	63.8% (146)	38.3% (88)
	trans women / transfeminine spectrum	12.2% (27)	< 1% (2)
	cisgender men	33.0% (76)	10% (23)
	trans men / transmasculine spectrum	19.6% (45)	3.5% (8)
	gender non-conforming or two spirit	29.3% (67)	7% (16)

HIV TESTING

About half of all participants reported testing for HIV in the past year (54.2%). Of those who had never been tested, 50% were between the ages of 18-and-24. Of those who had been tested for HIV in the past year (n=167), the majority were tested by a primary care provider (57.5%), while other respondents received testing services at an AIDS services organization or LGBT center in LA County (19.2%), a provider outside of LA County (7.8%), a county public health clinic in LA County (4.2%), Planned Parenthood (4.2%), or a school clinic (3.4%).

Nearly half of all respondents had been tested for other STIs in the past year (53.6%). Forty-six participants (14.9%) reported having never been tested for STIs.

ACCESS & UPTAKE OF PrEP

There is no standardized assessment measure for determining the sexual health needs of transmasculine people. An assessment of risk of HIV transmission must take into account gender and anatomical diversity of transmasculine people and their sexual partners, as well as cultural norms and nomenclature.^[1] In this study, we asked respondents who had a sexual partner in the past six months were asked if they had receptive frontal^[8] or receptive anal sex with a sexual partner. Those responding “yes” were asked if in the past six months, they had “receptive frontal or anal sex using a sexual partner’s penis that produces semen?” About one quarter answered “yes” (24.8%) and were considered as engaging recently in sex that could transmit HIV. Participants who reported having had bottom surgery were also asked if they had insertive sex in the past six months with a sexual partner and they were also included in this analysis (although risks of HIV transmission are unknown).

We adapted the Centers for Disease Control and Prevention’s 2017 Clinical Practice Guidelines to determine the percentage of participants who may be candidates for a PrEP prescription.^[9] Among those who engaged in sex that might transmit HIV, we considered those who reported: a) inconsistent condom use *and* more than one sexual partner in the past six months (12.9%); or b) having a sexual partner who is HIV-positive or whose HIV status was unknown (3.6%). We also included any participant who: a) were diagnosed with bacterial STI in the past year (e.g. chlamydia, gonorrhea, syphilis) (3.0%); b) used emergency birth control in the past year (5.5%); or c) exchanged sex for money, drugs, food or shelter in the past six months (4.3%) [Table 3]. After accounting for duplicates, we found that about one-fifth of participants were at sufficient risk of acquiring HIV for a provider to recommend PrEP (19.1%).

Table 3: Sexual risks of HIV transmission indicating potential candidacy for PrEP

		% (n)
ONE OR MORE SEXUAL PARTNER in the past 6 months (n=229)	Receptive frontal or anal sex with a penis that produces semen and/or insertive sex post-op	24.8% (75)
	And:	
	- Inconsistent condom use and 2+ partners	12.9% (39)
	- At least one sexual partner known to be HIV-positive or partner’s HIV status is unknown	3.6% (11)
AMONG ALL PARTICIPANTS	Bacterial STI in the past year (n=305)	3.0% (9)
	Used Plan B or had unexpected pregnancy in the past year (n=308)	5.5% (17)
	Exchanged sex in the past 6 months (n=301)	4.3% (13)
	TOTAL UNDUPLICATED	19.1% (58)

One-fifth of the respondents had never heard of PrEP or were unsure if they had ever heard of PrEP prior to taking the survey (20.1%). About 1 in 10 had spoken to a healthcare provider about PrEP (10.4%) and 4.5% had been prescribed PrEP. Of those who we determined to be potential PrEP candidates for recommending PrEP (n=58), 19.0% were currently taking PrEP and another 63.8% responded that they would definitely, probably, or might take PrEP if it were available to them for free.[7]

Table 4: HIV/STI testing, HPV vaccination, and PrEP awareness and uptake		
		% (n)
HIV TESTING MOST RECENT (n=308)	Less than six months	35.7% (110)
	Between six months and a year	18.5% (57)
	More than a year	32.1% (99)
	Never tested	13.6% (42)
STI TESTING MOST RECENT (n=308)	Less than six months	35.7% (110)
	Between six months and a year	17.9% (55)
	More than a year	31.5% (97)
	Never tested	14.9% (46)
PREP AWARENESS & UPTAKE^[7]	Has heard of PrEP	79.6% (246)
	Definitely knows of a provider to ask about PrEP	39.2% (121)
	Has spoken to a provider about PrEP (n=307)	10.4% (32)
	Has been prescribed PrEP	4.6% (14)

All participants were asked, “suppose that you wanted a prescription for PrEP. Do you have, or do you know of, a medical provider that you could go to for a prescription?”

We analyzed participants who said “definitely yes” as an indicator of having access to PrEP. Pearson’s chi square tests were used to examine differences in characteristics between respondents who reported having access PrEP (n=121; 39.2%) and those who did not (n=188; 60.8%) [Table 5]. A much greater percentage of participants who reported having access to PrEP had a primary care provider (PCP) who specializes in transgender health compared to those who did not report having access to PrEP (p <.005). A greater percentage of participants who reported having access to PrEP were: over the age of 25, but under 39 (p <.05). A greater percentage of participants who had access to PrEP also had a legal identification document that read “male” (p<.05). A greater percentage were white, Black / African-American, and Biracial /Multiracial and other, and a smaller percentage were Latinx / Hispanix / Chicanx or Asian / Pacific Islander / Native Hawaiian (p<.05). Access to PrEP did not differ significantly based on reported level of income.

“Learn about trans people, educate yourself on trans health care, be respectful and ask people what language to use.”

Table 5: Characteristics of respondents who know a provider they could ask about PrEP compared to those who do not know a provider (n=309)

	Knows a provider who can prescribe PrEP	Does not know a provider who can prescribe PrEP	χ^2 (p-value)
Age			10.29 (0.016)*
18-24	20.0% (24)	31.4% (59)	
25-29	28.9% (35)	30.9% (58)	
30-39	43.8% (53)	27.7% (52)	
40+	6.6% (8)	10.1% (19)	
Racial/ethnic Identity (n=304)			11.18 (0.024)*
Asian / Pacific Islander / Native Hawaiian	8.3% (10)	13.3% (25)	
Black / African-American	7.4% (9)	5.3% (10)	
Latinx / Hispanx / Chicanx	9.1% (11)	21.9% (41)	
White	49.6% (60)	38.5% (72)	
Biracial/Multiracial and Other	25.6% (31)	20.9% (39)	
Gender on ID Documents (n=295)			6.77 (0.009)*
Female	50.4% (59)	66.5% (121)	
Male	49.6% (58)	33.5% (61)	
Income (n=296)			4.48 (0.2143)
<\$12,000 per year	26.1% (31)	35.9% (65)	
\$12,000-\$36,000 per year	40.3% (48)	34.3% (62)	
\$36,000-\$60,000 per year	16.8% (20)	17.1% (31)	
>\$60,000 per year	16.8(20)	12.7%(23)	
Primary Care Provider (PCP) (n=297)			47.43 (<0.0001)**
No PCP	11.3% (13)	31.2% (58)	
Has PCP that does not specialize in trans health	30.4%(35)	48.9% (91)	
Has PCP that does specialize in trans health	58.3% (67)	19.9%(37)	

* < p = .05; ** < p = .0005.

SAFER SEX & PARTNER COMMUNICATION

Safer sex education and partner communication skills are important strategies in HIV prevention. We measured sexual health information by asking participants to evaluate the extent to which they agreed with the following statement on a 5-point scale: 1) "I feel informed about how to have safer sex." For participants who reported having a sexual partner in the past six months, we also asked the extent to which they agreed with the following statements: 2) "I feel confident in negotiating safer sex with my sexual partner(s)"; and 3) "My current sexual partner(s) and I have agreed on how to practice safer sex."

The majority reported that they felt informed about how to have safer sex (62.8%), felt confident negotiating safer sex with their sexual partners(s) (57.1%), and had agreed on how to practice safer sex with their current sexual partner(s) (54.9%). More than a third did not feel informed about how to have safer sex (37.2%) or confident negotiating safer sex with their sexual partner(s) (42.9%). Nearly half had not agreed on how to practice safer sex with their current sexual partner(s) (45.1%).

SEXUAL VIOLENCE

Participants were asked if they had experienced “unwanted sexual contact (such as oral, genital, or anal contact or penetration, sexualized touching/fondling, rape)?” in their lifetime. If yes, they were asked if they had experienced unwanted sexual contact in the past year. Nearly two-thirds of those responding had experienced unwanted sexual contact in their lifetime (65.7%) and more than 1 in 10 had experienced unwanted sexual contact in the past year (11.3%). Of respondents who experienced unwanted sexual contact in the past year (n=34), 11.8% had been diagnosed with a bacterial STI in the past year (i.e. gonorrhea, chlamydia, syphilis) compared to just 1.7% of respondents who did not report experiencing sexual violence in the past year (n=242; p = .006).

BARRIERS TO HEALTHCARE

The majority of participants were reporting having health insurance (90.3%), while 8.4% did not have health insurance and 1.3% were not unsure.

Participants were asked if they had delayed seeking healthcare in the past twelve months for one or more of 15 factors presented in a pre-coded list or due to another reason with a write-in option.^[10] A list of factors was developed through several community stakeholder meetings during survey development. More than three-quarters of respondents (75.7%) indicated that they had delayed accessing healthcare in the past twelve months for at least one reason, while 24.3% indicated that they did not delay care. Of all participants, more than half had delayed healthcare due to “depression / lack of motivation” (51.5%). Other common reasons for delaying healthcare included “cost / lack of money” (49.8%), “anxiety / trauma related to previous healthcare experiences” (48.5%), and “concern about mistreatment based on gender identity or expression” (45.0%). The top 9 factors selected as influencing delays in accessing healthcare are presented in Table 6.

“Medical forms and language are so gendered and I usually don’t even bother to disclose my trans identity because I don’t feel safe to.”

Table 6: Top 9 Reason for Delaying Care in the past 12 months	
	% (n)
Depression/ Lack of Motivation	51.5% (158)
Cost / Lack of Money	49.8% (154)
Anxiety / trauma related to previous healthcare experiences	48.5% (150)
Concern about mistreatment based on gender identity or expression	45.0% (139)
Lack of trust in medical providers	38.5% (119)
Do not want a physical examination	32.7% (101)
Can’t get time off work	30.7% (95)
Concern about mistreatment based on mental health symptoms/diagnoses	23.0% (71)
Concern about mistreatment based on race or ethnicity (n = 176)	22.2% (39)

RECOMMENDATIONS

The findings from this study highlight the importance of gender and sexual diversity in comprehensive HIV prevention planning. Transmasculine people both *belong to* and *sexually partner with* groups that are highly prioritized in HIV prevention research, policy, and practice (e.g. gay and bisexual men, trans women); yet they are rarely named explicitly and are sometimes actively excluded. These forms of exclusion may compound existing concerns and anxieties about mistreatment in healthcare settings and contribute to delays in seeking care.

Our results are consistent with previous U.S. studies reporting a zero to low incidence of HIV among transmasculine people in urban community samples.^[11] However, also consistent with previous studies, is our finding that a portion of transmasculine people are at risk of HIV and face barriers to accessing care.^[11] A multidimensional approach is needed to reach transmasculine people at risk of HIV. Prevention strategies should include and expand beyond reaching trans men who identify as gay or bisexual in order to ensure relevance across a diversity of gender identities and sexual partnering. They should further account for and address factors that may prevent transmasculine people from seeking services, including depression, gender discrimination, poverty, racism, sexual violence, and medical trauma.

Based on the findings in this report, we offer the following recommendations:

- 1. Ensure that community-based HIV prevention services are accessible to transmasculine people:** More than 1 in 10 participants in this study had never been tested for HIV and nearly half had not been tested for HIV in the past year (45.8%). The majority of participants who were tested for HIV in the past year were tested by a primary care provider (57.5%) and less than one-fifth were tested at a local community-based HIV services organization (19.2%). Community-based access points can play a crucial role in ensuring access to HIV and STI testing, education, and PrEP, particularly for those who cannot afford or who distrust medical providers. Dedicated HIV prevention funding streams should be revised to ensure that transmasculine people are not explicitly excluded from accessing existing services and that providers are appropriately trained and equipped to provide gender-affirming services. By including transmasculine people in services, organizations can actively promote safer sex awareness and inclusive sexual cultures for transmasculine people and their sexual partners.
- 2. Integrate gender diversity into sexual health literature and HIV prevention:** Including transmasculine people in HIV prevention research requires rethinking some of the basic assumptions about the relationship between gender and sexual risk that are currently embedded in policy and practice. Efforts to reach transmasculine people with HIV prevention messaging should include community-driven campaigns designed by and for transmasculine people, as well as diversification of mainstream literature to include a broader range of bodies, identities, and sexual partnering. Safer sex options should be presented with culturally relevant terminology and information, including barriers and lubricants that are safe and effective for transmasculine people. Materials should also integrate community developed information on partner negotiation and consent.
- 3. Create durable funding streams for primary care services that specialize in transgender health:** A greater percentage of participants who had access to PrEP had a primary care provider that specializes in transgender healthcare. The majority of participants who were tested for HIV in the past year were tested by a primary care provider (57.5%). Given the barriers to care identified by participants in this study, primary care sites that specialize in transgender health care may serve as a current frontline in HIV prevention for transmasculine people. These services may ensure a greater likelihood that transmasculine people will remain engaged in care and present increased opportunities for providers to issue targeted HIV prevention education and services.

- 4. Coordinate community-based sexual violence prevention and survivor advocacy with HIV prevention efforts:** Participants had experienced an exceptionally high rate of sexual violence, consistent with national findings from the U.S. Trans Survey.^[12] About 11.3% reported experiencing sexual violence in the past year. This compares to a much lower estimated prevalence of unwanted sexual contact among women (2.2%) and men (1.6%) of men in the general U.S. population. [13] We found associations between recent experiences of sexual violence and recent diagnoses for sexually transmitted infections. Such findings underscore a need for consent-based sexual education, community-based survivor advocacy, and trauma-informed services as essential components to a comprehensive HIV prevention strategy in California. Given the high incidence of reported unwanted sexual contact, access to prevention strategies that don't necessarily require partner negotiation may be particularly crucial for transmasculine people, including PrEP and post-exposure prophylaxis (PEP).
- 5. Improve accuracy of data collection and reporting:** Data collection and reporting mechanisms must be updated to adequately capture and track HIV-related service utilization among transmasculine people, as well as those with non-binary or gender non-conforming identities. Mandating collection of these data as standard protocol in surveillance activities is a first step, as is ensuring that healthcare providers, public health staff, HIV testing counselors, and related service providers are adequately trained and equipped to collect and protect gender-related data across diverse gender identities and experiences.

GLOSSARY

The following terms are defined as they were used in the survey associated with this report. Terminology was defined to create clarity across cultural, generational, and social differences. This is not intended as a general glossary of preferred terminology.

Cisgender: This term was used when asking participants to describe the genders of their sexual partners. The term *cisgender woman* was defined as a “a woman who is not transgender” and a *cisgender man* was defined as “a man who is not transgender.”

Community-based participatory research (CBPR): In this study, CBPR involved a process by which transmasculine community stakeholders were engaged during all phases and at multiple levels of the research process. This included: generating the mandate for research, identifying the scope of inquiry, defining and testing survey questions, recruiting participants, and engaging in data analyses and dissemination.

Frontal sex: An established alternative to the term “vaginal sex” that was selected by community stakeholders. The survey instrument alerted participants that the term vagina would be used only once for definitional purposes (in order to limit participant attrition). Participants who had undergone a vaginectomy did not receive questions related to receptive frontal sex.

Gender non-conforming: A concept used here as an umbrella term. This term was used in recruiting participants to the study including individuals who do not identify exclusively as women, but who do not identify with the terminology of transgender or transmasculine. Other terms used in this messaging included: non-binary, genderqueer, two spirit, intersex, and genderfluid. In the survey, participants were asked if any of their sexual partners were “non-binary / gender non-conforming / genderqueer.” This is abbreviated in this report as “gender non-conforming.”

Genital reconstruction or “bottom surgery”: Refers to a range of gender-affirming surgical procedures. For those on the transmasculine spectrum, this may include, but is not limited to: phalloplasty, metoidioplasty, testicular implants, urethroplasty, scrotoplasty, and vaginectomy.

Pre-Exposure Prophylaxis (or “PrEP”): A biomedical HIV prevention strategy defined in this survey as “a new medication to prevent HIV infection. PrEP involves HIV-Negative people taking daily anti-HIV medications to reduce the likelihood of HIV infection.”

Transmasculine: Broadly defined here to include individuals who were designated female at birth and do not identify (exclusively) as a woman.

REFERENCES

- [1] Reisner, S. L., & Murchison, G. R. (2016). A global research synthesis of HIV and STI biobehavioural risks in female-to-male transgender adults. *Global Public Health*, 11(7-8), 866-887. See also,
- [2] Wilson, B. D., & Miyashita, A. (2016). Sexual and gender diversity within the black men who have sex with men HIV epidemiological category. *Sexuality Research and Social Policy*, 13(3), 202-214.
- [3] Lemons, A., Beer, L., Finlayson, T., McCree, D. H., Lentine, D., Shouse, R. L., & Medical Monitoring Project. (2018). Characteristics of HIV-Positive Transgender Men Receiving Medical Care: United States, 2009–2014. *American Journal of Public Health*, 108(1), 128-130.
- [4] Scheim, A. I., Santos, G. M., Arreola, S., Makofane, K., Do, T. D., Hebert, P., ... & Ayala, G. (2016). Inequities in access to HIV prevention services for transgender men: results of a global survey of men who have sex with men. *Journal of the International AIDS Society*, 19(3Suppl 2); Sevelius, J. (2009). "There's no pamphlet for the kind of sex I have": HIV-related risk factors and protective behaviors among transgender men who have sex with nontransgender men. *Journal of the Association of Nurses in AIDS Care*, 20(5), 398-410.; Snelgrove, J. W., Jasudavicius, A. M., Rowe, B. W., Head, E. M., & Bauer, G. R. (2012). "Completely out-at-sea" with "two-gender medicine": A qualitative analysis of physician-side barriers to providing healthcare for transgender patients. *BMC Health Services Research*, 12(1), 110.
- [5] Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. <https://www.qualtrics.com>
- [6] Maman, S., Campbell, J., Sweat, M. D., & Gielen, A. C. (2000). The intersections of HIV and violence: directions for future research and interventions. *Social Science & Medicine*, 50(4), 459-478.
- [7] Survey questions related to PrEP were adapted from the PrEP Motivational Cascade. See Parsons, J. T., Rendina, H. J., Lassiter, J. M., Whitfield, T. H., Starks, T. J., & Grov, C. (2017). Uptake of HIV pre-exposure prophylaxis (PrEP) in a national cohort of gay and bisexual men in the United States. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 74(3), 285-292.
- [8] See glossary for definition. Contingency skip patterns were developed to create a survey experience attentive to anatomical differences among participants due to genital reconstructive surgeries.
- [9] Centers for Disease Control and Prevention US Public Health Service (2018) Preexposure prophylaxis for the prevention of HIV infection in the United States—2017 Update: A Clinical Practice Guideline. Available at: <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2017.pdf>
- [10] Participants who identified as white only were not displayed the following option: "Concern about mistreatment based on race or ethnicity"
- [11] McFarland, W., Wilson, E. C., & Raymond, H. F. (2017). HIV prevalence, sexual partners, sexual behavior and HIV acquisition risk among trans men, San Francisco, 2014. *AIDS and Behavior*, 21(12), 3346-3352.
- [12] James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. National Center for Transgender Equality. Available at: <http://www.ustranssurvey.org/preliminary-findings>.
- [13] Breiding, M. J. (2014). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—National Intimate Partner and Sexual Violence Survey, United States, 2011. *Morbidity and Mortality Weekly Report. Surveillance Summaries* (Washington, DC: 2002), 63(8), 1.