

Perceived Barriers to HIV Prevention Services for Transgender Youth

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Abstract

Purpose: Many transgender youth lack access to transgender affirming care, which may put them at risk for HIV. This study explored transgender youth's perceptions regarding encounters with primary care providers (PCPs) related to gender and sexual minority (GSM) identity and sexual health.

Methods: Youth ages 14–21 ($N=228$; 45% trans masculine, 41% trans feminine, 14% gender nonbinary) completed a survey on GSM identity disclosure and acceptance, gender-affirming services, sexual health attitudes and behaviors, and interactions with PCPs involving GSM identity and concerns about stigma and confidentiality.

Results: A factor analysis yielded three scales: GSM Stigma, Confidentiality Concerns, and GSM-Sexual Health Information. Items from the GSM Stigma scale showed that nearly half of respondents had not disclosed their GSM identity to their PCP due to concern about an unaccepting PCP. One-quarter of youth were less inclined to discuss GSM identity and sexual health with their PCP due to concern that their provider would disclose this information to parents; these concerns were greater among adolescents <18 and those not out to parents about their gender identity. Only 25% felt their PCP was helpful about GSM-specific sexual health issues. Youth who were out to parents about their gender identity and had received gender-affirming hormone therapy were more likely to report receiving GSM-specific sexual health information.

Conclusions: Transgender youth may not discuss their GSM identity or sexual health with PCPs because they anticipate GSM stigma and fear being “outed” to parents. PCPs should receive transgender-inclusive training to adequately address youths' sexual health needs and privacy concerns.

Keywords: adolescents, health disparities, HIV/AIDS, prevention, stigma, transgender

Introduction

TRANSGENDER YOUTH AND ADULTS, especially those who have sex with cisgender men, have been identified as a key population at risk for HIV and other sexually transmitted infections (STIs).^{1–6} A recent meta-analysis indicated that 22% of trans-feminine (TF) people in the United States are living with HIV.⁷ Although less research has been conducted on HIV in trans-masculine (TM) people, surveillance data show that of the 2351 transgender patients newly diagnosed with HIV from 2009 to 2014, 15% of diagnoses were among TM patients.⁸ In addition, in the 3.3 million HIV testing events reported to the Centers for Disease Control and Prevention in 2013, the percentage of transgender individuals newly diagnosed with HIV was nearly three times the national average.⁸

Transgender people also report significantly lower lifetime rates of HIV testing (35.6% for TF individuals and 31.6% for TM individuals) relative to cisgender gay and bisexual men (61.8%), and HIV testing rates are likely lower among transgender adolescents.⁹ Moreover, a community health center chart review of sexually active transgender youth revealed STI prevalence between 1.4% and 2.8%.¹⁰ Transgender adults report high levels of discrimination, including denial of medical services and harassment, in healthcare settings^{11–13} and anticipation of discrimination has been associated with postponement of medical services.^{12–16}

HIV risk among transgender youth may be related to the developmental, psychological, social, and structural transitions that converge in this period of the life span.^{17,18} Higher levels of depression and psychological distress among transgender adults have been associated with reports of transgender-related

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victimization and discrimination,^{19,20} and these concerns combined with other psychosocial health problems are linked to elevated HIV risk, particularly among young transgender women.¹⁸ It is possible that these patterns may also manifest among transgender youth. Moreover, research suggests that transgender youth may face similar barriers to HIV prevention services tailored to their needs as do transgender adults, including discomfort discussing transgender-specific health issues with physicians and lack of access to transgender-friendly and knowledgeable providers.^{15,21–24} Despite the burden of HIV facing transgender youth, little is known about whether anticipation of provider stigma creates barriers to HIV/STI preventive services.²⁵ TF people are often grouped with and underrepresented in studies of cisgender men who have sex with men.^{26,27} Moreover, TM people are often excluded from HIV prevention research on the erroneous assumption that their sexual relationships are nearly exclusively with cisgender women.^{25,28,29} Even less is known about the sexual risks and informational needs of youth who identify as gender nonbinary (GNB).^{30,31}

For some transgender youth, fear of sexual minority discrimination may present additional barriers to HIV preventive services. Transgender adults and adolescents endorse multiple sexual orientation identities to describe attraction across gender lines.^{32–36} As such, accurate assessment of transgender individuals' sexual health requires an understanding of both their sexual orientation and gender identity, the sexual behaviors in which they are engaging, and the people with whom they are having sex. However, information on how to take routine sexual histories of transgender patients is sparse.^{37,38} Thus, primary care providers (PCPs) may not know how best to inquire about their transgender patients' sexual health and behavior, or may avoid discussing sexual health altogether, including HIV/STI prevention strategies.

Whether transgender youth have disclosed their gender identity and sexual orientation to family members may also influence patient/provider communication. In the United States, although no states expressly prohibit HIV preventive care to minors, state laws are inconsistent in expressly permitting youth independent access to HIV/STI prevention services and treatment³⁹; and even when such laws exist, youth, parents, and providers may be unaware of or in disagreement about minors' right to confidential services. Transgender youth's fears of stigmatization, punishment, or physical harm if gender identity, sexual orientation, or sexual activities are disclosed to parents may exacerbate fear of discussing HIV/STI services with PCPs.

Aims of the present study

Access to gender-affirming sexual healthcare is likely critical to preventing HIV and STIs among transgender youth. Such care includes creating a medical environment in which youth feel that the provider is accepting of their gender identity and sexual orientation, is knowledgeable about transgender sexual health needs, and respectful of youth confidentiality concerns. For many youth, their PCP may be their only means of receiving HIV/STI preventive information and care. Yet, little is known about youths' attitudes toward sharing information about their gender identity, sexual orientation, sexual behavior, and HIV/STI risk behavior with providers, and recent research suggests that providers may be

reluctant to initiate discussions of these issues with adolescent patients, making it difficult to provide care tailored to the needs of transgender youth.⁴⁰ Findings on transgender youth's perspectives on participation in HIV prevention trials suggest they fear stigmatization, punishment, and physical harm if gender identity, sexual orientation, or sexual activities are disclosed to parents.⁴¹ It is likely that these same concerns about disclosure to parents in a healthcare context may exacerbate fear of discussing sexual health services with PCPs.^{42,43}

The primary aim of this study was to explore the extent to which transgender youth anticipate gender and sexual minority (GSM) stigma by their PCP; avoid discussing sexual orientation, gender identity, and sexual health with their PCP due to confidentiality concerns; and perceive their PCP to be helpful in providing sexual health information specific to transgender and LGB individuals. We also examined relationships between youths' perceptions of communications with their PCPs and their sociodemographic characteristics, sexual health behaviors and attitudes, and receipt of gender-affirming care, among other correlates.

Methods

The data reported here are part of a larger Internet-based survey on transgender youths' experiences with and attitudes toward sexual health research and services, conducted in spring 2016. Participants were recruited primarily through Facebook paid posts that directed viewers to a page providing a brief study description and link to a seven-item screening questionnaire. The screener questions assessed eligibility using the following inclusion criteria: age 14–21 years, identifying as transgender, and living in the United States.

The screener item had three responses that qualified individuals for inclusion (“Yes, I am transgender and identify as a boy or a man,” “Yes, I am transgender and identify as a girl or woman,” and “Yes, I am transgender and identify in some other way”) and three disqualifying responses (“I do not know if I am transgender,” “No, I am not transgender,” and “I do not know what this question is asking”). For data analysis, youth designated as GNB responded “Yes, I am transgender, but identify in some other way” on the screener and in an open-ended survey question described their gender identity with terms such as gender nonbinary, agender, bigender, and gender fluid. Those who endorsed “Yes, I am transgender and identify as a boy or a man” were designated as trans masculine, and those who endorsed “Yes, I am transgender and identify as a girl or a woman” were designated as trans feminine.

Of those completing the screener, 537 met inclusion criteria and were sent a link to the study; of these, 233 (43.39%) completed the survey. After the exclusion of five participants with suspicious survey responses (e.g., lack of response variability), our final sample numbered 228.

Survey measures

Items were developed from initial interviews and focus groups with transgender youth, recommendations from an expert advisory board, and online piloting of items with a sample of 11 transgender youth. Demographic questions included race, ethnicity, living situation, parents' education, grade, and youth's employment. As a validity check for the transgender identity screener response, we included multiple choice questions about preferred pronoun and sex assigned at birth

and an open-ended question on gender identity. Responses to these items were consistent with the screener response for all participants. An additional item asked about the age at which one first identified as transgender. Sexual orientation questions included the following: (a) items on the gender of persons to whom the participants were sexually attracted and with whom they had a sexual experience; and (b) self-reported sexual orientation identities assessed through both an open-ended question and a checklist of common terminology.

Data were also collected on number of sexual partners (lifetime and 12 months; with those reporting at least one lifetime partner considered to be sexually active), gender of sexual partners in the past 12 months (cisgender male, cisgender female, TM, and TF partners), self-reported HIV and STI testing history, and two 5-point Likert-type items assessing whether they thought they were likely (extremely unlikely–extremely likely) to be infected with HIV and how much they worried about HIV infection (none of the time–all of the time).⁴⁴ Two 4-point items examined the extent to which youth were out to people around them about their gender identity and their sexual orientation (not out to anyone, only a select few people, most people, everyone). We asked youth to identify up to two guardians and for each guardian asked whether they were out to them about their transgender identity (yes/no) and sexual orientation (yes/no). For each guardian, five-point Likert-type questions were asked regarding how accepting the guardian is of their transgender identity and of their sexual orientation (1 = very accepting–5 = very rejecting).⁴⁵ Four additional yes/no questions asked whether youth had discussed with a provider or received puberty-suppressing therapy (PBT) or gender-affirming hormone therapy (GHT).

Views on interpersonal communications with PCPs were assessed through 10 Likert-type questions (1 = strongly agree; 5 = strongly disagree) developed from interviews, a scientific expert panel, and focus groups, including the following: (a) whether their PCP was aware of their gender identity or sexual orientation (two items); (b) concerns that the provider would not be accepting of their gender identity or sexual orientation (two items); (c) reticence in discussing sexual health concerns out of fear that their provider would disclose their gender identity, sexual orientation, sexual activity, or an STI to parents (four items); and (d) whether their provider had given them sexual health information specifically helpful for transgender, and lesbian, gay, and bisexual youth (two items).

Procedures

Participants not meeting inclusion criteria were sent a link to a Facebook page⁴⁶ with continuous updates for LGBT news and resources. Those who met criteria on the screening instrument were provided with a code number and invited to text the number and their e-mail address to a secure site monitored by staff to minimize threats to validity (e.g., bots, repeat participants). Links to the surveys could only be obtained by participants who texted with a valid code number from a unique, U.S.-based phone number and a valid e-mail address. Phone numbers and e-mail addresses were screened to ensure that they had not been submitted previously. Eligible individuals were sent a link to an informed consent form and youth who consented by checking a box were linked to the survey site. Youth younger than 18 were permitted to self-consent under

a waiver of guardian permission from the Fordham University and Northwestern University Institutional Review Boards, which approved the study. All screening, consent, and survey sites included firewall protections with data encryption. A federal Certificate of Confidentiality was obtained. Participants could end their participation at any time and opt out of answering sensitive questions. On survey completion, participants were directed to a webpage with no link to their individual survey responses to receive a \$20 Amazon.com gift certificate.

Data analysis

Descriptive statistics were computed for demographic characteristics, gender identity, sexual orientation, “outness” and acceptance by family and others, receipt of PBT or GHT, number and gender of sexual partners, HIV risk attitudes, and HIV/STI testing. Chi-square tests and multivariate analysis of variance (ANOVA) compared responses across gender identity (TM, TF, GNB) and age (<18 and ≥18). Item and scale scores derived from a factor analysis on the 10 interpersonal communications with the PCP item scale were computed across gender identity. Chi-square tests, multivariate ANOVA, and correlations examined associations between scale scores and the following variables: gender identity and age, whether youth had disclosed their sexual orientation or gender identity to at least one guardian, number of sexual partners, HIV/STI testing and HIV risk attitudes, and receipt of PBT or GHT from a healthcare provider.

Results

The sample included 103 TM, 93 TF, and 32 GNB youth. One hundred and two (44.7%) participants were younger than 18 (Table 1) and average age of first transgender self-identification was 13 (range = 2.5–20 years). The majority were in high school or college, lived with family, and either worked part-time or did not work at all. Most participants had disclosed their gender identity to their primary and secondary guardians. TM youth were more likely than TF and GNB youth to have disclosed their gender identity to their primary and secondary guardian ($X^2_2 = 7.36, p < 0.05$; $X^2_2 = 6.81, p < 0.05$) and to be “out” to most or all people ($X^2_2 = 24.43, p < 0.001$). TF youth were more likely than TM or GNB youth to have received PBT ($X^2_2 = 16.15, p < 0.001$); 16% of youth younger than 18 and 41% of older youth had received GHT ($X^2_2 = 16.70, p < 0.001$).

As shown in Table 2, half of the youth endorsed more than one sexual orientation ($M = 1.89, SD = 1.06$; range = 1–6). Most had disclosed their sexual orientation to their primary and secondary guardian, and disclosure to either guardian did not differ significantly by gender identity. TM youth were most likely to report they were out to most or all people about their sexual orientation ($X^2_6 = 17.70, p = 0.01$). The majority of youth (74%) had at least one lifetime sexual partner, and 61% reported at least one sexual partner during the past 12 months. The majority believed they were unlikely to be infected with HIV and worried about HIV either none of the time or rarely. Age was positively correlated with number of lifetime sexual partners ($r = 0.37, p < 0.001$), but not with number of sexual partners in the past 12 months: 58% of 14–17-year olds and 87% of youth ages 18–21 reported at least 1 lifetime sexual partner: ($M = 3.88, SD = 3.00$; range = 1–10 and $M = 6.41, SD = 6.41$; range = 1–25 or more), respectively.

TABLE 1. DEMOGRAPHIC CHARACTERISTICS, GENDER IDENTITY DISCLOSURE AND ACCEPTANCE, AND GENDER-AFFIRMING SERVICES FOR TRANS-MASCULINE, TRANS-FEMININE, AND GENDER NONBINARY PARTICIPANTS

Characteristics	Trans masculine (n=103), N (%)	Trans feminine (n=93), N (%)	Gender nonbinary (n=32), N (%)	Total (n=228), N (%)
Race/ethnicity ^a				
Hispanic	15 (14.6)	11 (11.8)	2 (6.3)	28 (12.3)
White	90 (87.4)	82 (88.2)	28 (87.5)	200 (87.7)
Black	6 (5.8)	5 (5.4)	2 (6.3)	13 (5.7)
Asian/Pacific Islander	4 (3.9)	4 (4.3)	1 (3.1)	9 (3.9)
American Indian/Alaskan	6 (5.8)	4 (4.3)	1 (3.1)	11 (4.8)
Other	9 (8.7)	4 (4.3)	3 (9.4)	16 (7.0)
Do not wish to answer	2 (1.9)	2 (2.2)	2 (6.3)	6 (2.6)
Age ^b (years)	17.94 ± 1.86	17.98 ± 1.77	17.25 ± 2.03	17.86 ± 1.86
14–17	44 (42.7)	39 (41.9)	19 (59.4)	102 (44.7)
18–21	59 (57.3)	54 (58.1)	13 (40.6)	126 (55.3)
Grade				
7–12	50 (48.5)	46 (49.5)	19 (59.4)	115 (50.4)
College	29 (28.2)	31 (33.3)	6 (18.8)	66 (28.9)
Not in school	24 (23.3)	16 (17.2)	7 (21.9)	47 (20.6)
Age first identified as transgender ^b	13.07 ± 3.86 Range = 2.5–20	12.48 ± 3.97 Range = 3–20	13.58 ± 3.15 Range = 5–19	12.91 ± 3.82 Range = 2.5–20
Living situation				
With parents or family	70 (68.0)	66 (71.0)	25 (78.1)	161 (70.6)
Alone	7 (6.8)	12 (12.9)	2 (6.3)	21 (9.2)
With roommate	14 (13.6)	8 (8.6)	2 (6.3)	24 (10.5)
With romantic partner	11 (10.7)	6 (6.5)	2 (6.3)	19 (8.3)
No permanent address	1 (1.0)	1 (1.1)	1 (3.1)	3 (1.3)
Employment				
Full-time job	11 (10.7)	9 (9.7)	1 (3.1)	21 (9.2)
Part-time job	31 (30.1)	45 (48.4)	16 (50.0)	92 (40.4)
Do not work	61 (59.2)	39 (41.9)	15 (46.9)	115 (50.4)
Primary guardian				
Identified as “mother”	76 (73.8)	58 (62.4)	28 (87.5)	162 (71.1)
Identified as “father”	14 (13.6)	18 (19.4)	1 (3.1)	33 (14.5)
Identified as “other”	13 (12.6)	17 (18.3)	3 (9.4)	33 (14.5)
Primary guardian education				
High school or less	25 (24.3)	37 (39.8)	5 (15.6)	67 (29.4)
College (1–4 years)	45 (43.7)	33 (35.5)	17 (53.1)	95 (41.7)
Graduate school	31 (30.1)	22 (23.7)	8 (25.0)	61 (26.8)
I don’t know	2 (1.9)	1 (1.1)	2 (6.3)	5 (2.2)
Secondary guardian (N=144)				
Identified as “mother”	6 (8.3)	10 (20.0)	1 (4.5)	17 (11.8)
Identified as “father”	45 (62.5)	27 (54.0)	20 (90.9)	92 (63.9)
Identified as “other”	21 (29.2)	13 (26.0)	1 (4.5)	35 (24.3)
Secondary guardian education				
High school or less	16 (22.2)	15 (30.0)	3 (13.6)	34 (23.6)
College (1–4 years)	28 (38.9)	15 (30.0)	13 (59.1)	56 (38.9)
Graduate school	23 (31.9)	20 (40.0)	4 (18.2)	47 (32.6)
I don’t know	5 (6.9)	0 (0.0)	2 (9.1)	7 (4.9)
Disclosed gender identity to guardian				
Primary guardian	90 (87.4)	68 (73.1)	23 (71.9)	181 (79.4)*
Secondary guardian ^c	59 (81.9)	31 (62.0)	14 (63.6)	104 (72.2)*
Guardian is very—somewhat accepting of transgender identity ^d				
Primary guardian	67 (74.4)	47 (69.1)	13 (56.5)	127 (70.2)
Secondary guardian	38 (64.4)	18 (58.1)	4 (28.6)	60 (57.7)
“Out” to most or all people about transgender identity	88 (85.4)	50 (53.8)	19 (59.4)	157 (68.9)***
Received puberty-suppressing therapy	4 (3.9)	21 (22.6)	3 (9.4)	28 (12.3)***
Received gender-affirming hormone therapy	32 (31.1)	30 (32.3)	5 (15.6)	67 (29.4)***

^aParticipants could select more than one option.

^bMean ± SD.

^cPercentage of disclosure to secondary guardian calculated on the number of youth who had a secondary guardian.

^dPercentage of acceptance is calculated on the number of youth who disclosed their gender identity to the guardian.

* $p < 0.05$; *** $p < 0.001$.

TABLE 2. SEXUAL ORIENTATION IDENTITY, SEXUAL ORIENTATION DISCLOSURE TO FAMILY AND OTHER PEOPLE, SEXUAL PARTNERS, HIV RISK ATTITUDES, AND HIV/SEXUALLY TRANSMITTED INFECTION TESTING

Characteristics	Trans masculine (n=103), N (%)	Trans feminine (n=93), N (%)	Gender nonbinary (n=32), N (%)	Total (n=228), N (%)
Sexual orientation identity ^a				
Identify as pansexual	50 (48.5)	41 (44.1)	21 (65.6)	112 (49.1)
Identify as queer	44 (42.7)	23 (24.7)	23 (71.9)	90 (39.5)***
Identify as bisexual	24 (23.3)	26 (28.0)	8 (25.0)	58 (25.4)
Identify as gay	23 (22.3)	12 (12.9)	10 (31.3)	45 (19.7)
Identify as asexual	24 (23.3)	11 (11.8)	6 (18.8)	41 (18.0)
Identify as questioning/unsure	13 (12.6)	16 (17.2)	3 (9.4)	32 (14.0)
Identify as lesbian	0 (0.0)	22 (23.7)	6 (18.8)	28 (12.3)***
Identify as heterosexual	13 (12.6)	9 (9.7)	1 (3.1)	23 (10.1)
Do not wish to answer	0 (0.0)	2 (2.2)	0 (0.0)	2 (0.9)
Disclosed sexual orientation to guardian				
Primary guardian	80 (77.7)	65 (69.9)	23 (71.9)	168 (73.7)
Secondary guardian ^b	48 (66.7)	34 (68.0)	15 (68.2)	97 (67.4)
Guardian is very—somewhat accepting of sexual orientation ^c				
Primary guardian	62 (77.5)	43 (66.2)	16 (69.6)	121 (72.0)
Secondary guardian	38 (79.2)	22 (64.7)	6 (40.0)	66 (68.0)*
“Out” to most or all people about sexual orientation	90 (87.4)	61 (65.6)	25 (78.1)	176 (77.2)*
Lifetime no. of sexual partners ^d	4.42 ± 4.89	4.09 ± 4.44	4.94 ± 6.15	4.36 ± 4.90
No. of sexual partners in the past 12 months ^d	2.38 ± 2.83	2.44 ± 2.71	2.72 ± 2.17	2.45 ± 2.69
Cisgender male partners	50 (48.5)	43 (46.2)	18 (56.3)	111 (48.7)
Cisgender female partner	53 (51.5)	43 (46.2)	12 (37.5)	108 (47.4)
Trans-feminine partners	12 (11.7)	9 (9.7)	5 (15.6)	26 (11.4)
Trans-masculine partners	24 (23.3)	18 (19.4)	14 (43.8)	56 (24.6)
Little perceived risk of HIV infection	87 (84.5)	71 (76.3)	28 (87.5)	186 (81.6)
Little worry about HIV	78 (75.7)	61 (65.6)	20 (62.5)	159 (69.7)
Tested for HIV	24 (23.3)	31 (33.3)	12 (37.5)	67 (29.4)
Tested for STI	32 (31.1)	27 (29.0)	12 (37.5)	71 (31.1)

^aParticipants could select more than one option.

^bPercentage of disclosure to secondary guardian calculated on the number of youth who had a secondary guardian.

^cPercentage of guardian acceptance calculated on the number of youth who disclosed their sexual orientation to the guardian.

^dActual range for number of lifetime and 12-month sexual partners is 0 to >25 for all categories.

* $p < 0.05$; *** $p < 0.001$.

STI, sexually transmitted infection.

Perceptions of patient/provider communications

A factor analysis using varimax rotation assessed whether the 10 items yielded distinct conceptual categories for perceptions of communications with one's PCP and whether gender identity and sexual orientation concerns loaded similarly on these dimensions (Table 3). Gender identity and sexual orientation items converged to yield the following three factors (total variance explained = 73.78): GSM Stigma (four items; $\alpha = 0.87$); Confidentiality Concerns (four items, $\alpha = 0.81$); and GSM-Sexual Health Information (two items, $\alpha = 0.85$). GSM Stigma and Confidentiality Concerns indices were positively correlated ($r = 0.59$, $p < 0.001$) and negatively correlated with GSM-Sexual Health Information (r 's = -0.48 and -0.26 , respectively, $p < 0.001$). The pattern of results on individual items and composite scores did not differ between sexually active youth (at least one lifetime sexual partner) and youth who had never had sex. In addition, there were no differences between youth who had and had not had sex with cisgender male partners. Overall the percentages and standard deviations illustrate a wide range of responses to both positively and negatively worded items, suggesting that the direction of question wording did not produce response bias.

GSM stigma

Almost half of the respondents indicated that their provider was unaware of their gender identity or sexual orientation and expressed concern that disclosure would result in lack of acceptance. While no differences among trans-masculine, trans-feminine, and GNB participants emerged, younger respondents ($M = 3.49$, $SD = 1.64$) were significantly more likely than older youth ($M = 2.98$, $SD = 1.64$) to have higher GSM Stigma scores, $F_{1,222} = 6.37$, $p < 0.05$. Correlations revealed significant associations between lower GSM Stigma and perceiving that their regular doctor is helpful about sexual health issues specific to transgender and LGB individuals, being out to at least one parent about their gender identity, being out to at least one parent about their sexual orientation, and receiving GHT (r 's = -0.48 , -0.33 , -0.14 , -0.16 , respectively).

Confidentiality concerns

On average, 25% of youth worried that their PCP would disclose information about their gender identity, sexual orientation, sexual activity, or an STI to parents. TM youth had significantly fewer confidentiality concerns on the Confidentiality Concerns composite score ($F_{2,225} = 4.24$, $p < 0.05$) and the individual items reflecting confidentiality concerns

TABLE 3. FACTOR LOADINGS AND MEANS AND PERCENTAGE AGREEMENT FOR ITEMS EXAMINING TRANSGENDER YOUTH'S PERCEPTIONS OF COMMUNICATION WITH PRIMARY CARE PROVIDERS

Variable	Factor loading ^a			Trans masculine (N=103) M (SD) N (%)	Trans feminine (N=93) M (SD) N (%)	Gender nonbinary (N=32) M (SD) N (%)	Total (N=228) M (SD) N (%)
	F1	F2	F3				
GSM Stigma, a=0.87				3.17 (1.38) 54 (52.4)	3.20 (1.18) 40 (43.0)	3.57 (1.24) 20 (62.5)	3.24 (1.28) 114 (50.0) ^b
I do not discuss my transgender identity with my doctor because I worry or know my doctor will not be accepting of my gender identity.	0.84	0.15	-.26	3.17 (1.59) 54 (52.4)	3.01 (1.51) 39 (41.9)	3.44 (1.34) 18 (56.3)	3.14 (1.52) 111 (48.7)
I do not discuss my sexual orientation with my doctor because I worry or know my doctor will not be accepting of my sexual orientation.	0.79	0.24	-.22	2.85 (1.59) 44 (42.7)	2.99 (1.39) 36 (38.7)	3.16 (1.42) 16 (50.0)	2.95 (1.49) 96 (42.1)
When I go for a general medical checkup, my regular pediatrician or family doctor does not know I am transgender.	0.79	0.07	-.025	3.06 (1.74) 49 (47.6)	3.19 (1.57) 42 (45.2)	3.72 (1.57) 21 (65.6)	3.21 (1.66) 112 (49.1)
When I go for a general medical checkup, my regular pediatrician or family doctor assumes that I am heterosexual/straight.	0.66	0.18	-.030	3.60 (1.42) 60 (58.3)	3.62 (1.21) 52 (55.9)	3.97 (1.45) 26 (81.3)	3.66 (1.34) 138 (60.5)
Confidentiality Concerns, a=0.81				2.29 (1.12) 20 (19.4)	2.76 (1.21) 30 (32.3)	2.70 (1.14) 7 (21.9)	2.54 (1.18)* 57 (25.0) ^b
I do not ask my regular doctor for information about condoms or other ways to prevent HIV/STIs because I worry that my doctor would tell my parents I was sexually active.	0.17	0.84	-.013	2.55 (1.43) 28 (27.2)	2.82 (1.41) 27 (29.0)	2.78 (1.50) 10 (31.3)	2.69 (1.43) 65 (28.5)
I do not ask my regular doctor for information about condoms or other ways to prevent HIV/STIs because I worry that my regular doctor would tell my parents if I had a sexually transmitted infection.	0.14	0.84	-.015	2.68 (1.43) 29 (28.2)	2.99 (1.43) 36 (38.7)	3.09 (1.59) 15 (46.9)	2.86 (1.46) 80 (35.1)
I do not discuss my gender identity with my doctor because I worry the doctor would tell my parents about my gender identity.	0.68	0.50	0.04	2.00 (1.48) 21 (20.4)	2.69 (1.57) 32 (34.4)	2.66 (1.43) 10 (31.3)	2.37 (1.54)** 63 (27.6)
I do not discuss my sexual orientation with my doctor because I worry the doctor would tell my parents about my sexual orientation.	0.56	0.58	0.13	1.94 (1.41) 16 (15.5)	2.54 (1.49) 24 (25.8)	2.25 (1.37) 6 (18.8)	2.23 (1.46)* 46 (20.2)
GSM-Sexual Health Information, a=0.85				2.52 (1.10) 20 (19.4)	3.06 (1.04) 31 (33.3)	2.41 (1.07) 6 (18.8)	2.72 (1.10)*** 57 (25.0) ^b
When I go for a medical checkup, my regular pediatrician or family doctor is helpful about sexual health issues specifically for transgender individuals.	-0.25	-0.02	0.88	2.48 (1.21) 19 (18.4)	3.04 (1.21) 28 (30.1)	2.38 (1.07) 3 (9.4)	2.69 (1.22)*** 50 (21.9)
When I go for a medical checkup, my regular pediatrician or family doctor is helpful about sexual health issues specifically for gay, lesbian, or bisexual individuals.	-0.21	-0.16	0.87	2.57 (1.18) 17 (16.5)	3.08 (1.02) 25 (26.9)	2.44 (1.13) 6 (18.8)	2.76 (1.14)** 48 (21.1)

^aFor factor analysis: Kaiser-Meyer-Olkin=8.15; Bartlett's test of sphericity $X^2_{45}=1248.14$, $p<0.001$. Factor loadings in boldface indicate the factor to which a particular item corresponded.

^bPercentages of agreement for composite indices calculated for scores ≥ 3.50 .

* $p<0.05$; ** $p<0.01$; *** $p<0.001$.

M, mean; SD, standard deviation; GSM, gender and sexual minority.

about gender identity and sexual orientation disclosure ($F_{2,225}=5.73, p<0.01$ and $F_{2,225}=4.20, p<0.05$, respectively) than TF and GNB youth. On the composite score, younger participants had significantly higher Confidentiality Concerns than older participants ($M=2.91, SD=1.13$ and $M=2.71, SD=1.14$; $F_{1,222}=16.73, p<0.001$). Youth who had not disclosed their gender identity to at least one parent had higher Confidentiality Concerns composite scores (74.6% v. 16%; $X^2_1=58.01, p<0.001$). Controlling for age, youth who received GHT reported fewer Confidentiality Concerns ($F_{1,225}=11.49, p<0.001$).

GSM-sexual health information

Across the two items, 25% of participants reported that their providers gave helpful information specific to the sexual health needs of GSM youth as measured by the GSM-Sexual Health Information composite score. TF youth were significantly more likely than TM and GNB youth to have received such information as assessed by the GSM-Sexual Health Information composite score ($F_{2,222}=7.65, p<0.001$) and individual items indicating that their provider was helpful about sexual health issues specifically for transgender individuals and for gay, lesbian, or bisexual individuals ($F_{2,222}=6.92, p<0.001$ and $6.47, p<0.01$, respectively). Controlling for age, youth who received GHT reported significantly higher scores on the GSM-Sexual Health Information scale ($F_{1,225}=21.50, p<0.001$). Youth who had disclosed their transgender identity to parents had higher GSM-Sexual Health Information scores ($M=2.83, SD=1.08$, and $M=2.27, SD=1.10$, respectively, $t_{226}=3.08, p<0.05$). However, neither GSM-Sexual Health Information nor the other composite scores were significantly related to whether sexually active youth had received an HIV or STI test.

Discussion

This is the first study to our knowledge to explore how transgender youth ages 14–21 years perceive communication about gender identity, sexual orientation, sexual activity, and sexual health information with their PCP. Consistent with studies with older samples, individual items on the GSM Stigma scale indicated that close to half of the participants did not disclose their transgender identity and sexual orientation to their PCP because they believed their provider would not be accepting.^{12–15} Twenty-five percent of youth indicated that they did not ask for sexual health information or discuss their gender identity or sexual orientation because of concern that their provider would disclose this information to their parents. Our findings suggest that starting in early adolescence, anticipation of discrimination and distrust in patient/provider privacy obligations may contribute to HIV health disparities in this population.

In response to a checklist, half of the participants indicated that they used multiple terms (e.g., gay and pansexual) to describe their sexual orientation and the factor analysis indicated that gender identity and sexual orientation items converged to yield unified dimensions of GSM stigma, confidentiality concerns, and GSM-sexual health information. This suggests that the dual marginalized status of transgender youth who are sexual minorities, associated anticipation of both gender and sexual minority stigma, and fear of confidentiality breaches may be significant barriers to HIV/STI preventive services.

Strengths and limitations

Our data strongly suggest that GSM stigma and confidentiality concerns negatively affect patient/provider communication critical to HIV/STI prevention for transgender youth. Although receipt of GSM-specific sexual health information was not associated with HIV/STI testing, this may be due to the high percentage of sexually active youth who did not believe they were at risk for HIV. Together with findings from research suggesting low HIV/STI knowledge in sexual minority youth, our findings emphasize the need to increase HIV/STI informational services for this age group.^{47,48} On a positive note, youth who received GHT and thus had access to a provider sensitive to transgender medical needs were more likely to report receiving transgender-specific sexual health information.

The online methods allowed for a large sample of transgender youth and likely improved comfort in responding, and the validation process increased the certainty that inclusion criteria were met. However, the sample was limited to youth who frequent GSM social media sites.⁴⁹ The sample had high percentages of acceptance by at least one family member and may not capture the views of transgender youth from nonsupportive homes.⁵⁰ Nonetheless, analyses of the relationship between scores on the GSM Stigma scale and outness to parents indicated that youth who had not disclosed their gender identity and sexual orientation to parents were also less likely to disclose to their healthcare provider or report that their provider did not know about their GSM identity. Finally, despite advertisements posted on social media sites featuring popular ethnic minority transgender role models, our sample was predominantly non-Hispanic White. Racial/ethnic minority transgender youth deserve additional attention to illuminate their healthcare needs.^{15,31}

Conclusion

This study explored how anticipation of GSM stigma as well as confidentiality breaches are likely to contribute to HIV/STI healthcare disparities among transgender youth. PCPs are in a critical position to acknowledge and affirm the sexual health needs of transgender youth, especially for adolescents who may not be out to parents or have not received gender-affirming healthcare. These results support recommendations that encourage increased provider training that addresses the healthcare needs of transgender youth.^{51,52}

The results also underscore the need for providers to recognize that traditional labels for sexual orientation and gender identity may not adequately apply to transgender youth and to feel comfortable about asking patients to help them understand affirming terms for their gender identity and sexual attractions. Fear of provider disclosure of GSM status and sexual behavior to parents/guardians emerged as a barrier to sexual health communications with providers. These results highlight the need for providers to be sensitive to transgender youth's privacy concerns¹⁶ and to discuss their commitment to confidentiality rights with patients. PCPs are often the initial gateway to transgender youth's experience with and later attitudes toward the medical establishment. Enhanced transgender-inclusive training for PCPs is needed to ensure that transgender youth will have the confidence and experience to communicate their sexual health needs in future interactions with the medical establishment.^{51,53,54}

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Author Disclosure Statement

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References

- Poteat T, Reisner SL, Radix A: HIV epidemics among transgender women. *Curr Opin HIV AIDS* 2014;9:168–173.
- Institute of Medicine (US) Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities: *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: National Academies Press, 2011.
- Centers for Disease Control and Prevention: HIV surveillance—adolescents and young adults. 2015. Available at www.cdc.gov/hiv/pdf/statistics_surveillance_Adolescents.pdf Accessed January 8, 2018.
- Feldman J, Romine RS, Bockting WO: HIV risk behaviors in the U.S. transgender population: Prevalence and predictors in a large internet sample. *J Homosex* 2014;61:1558–1588.
- Santos GM, Wilson EC, Rapues J, et al.: HIV treatment cascade among transgender women in a San Francisco respondent driven sampling study. *Sex Transm Infect* 2014;90:430–433.
- Wilson EC, Chen YH, Arayasirikul S, et al.: Differential HIV risk for racial/ethnic minority trans*female youths and socioeconomic disparities in housing, residential stability, and education. *Am J Public Health* 2015;105:e41–e47.
- Baral SD, Poteat T, Strömdahl S, et al.: Worldwide burden of HIV in transgender women: A systematic review and meta-analysis. *Lancet Infect Dis* 2013;13:214–222.
- Centers for Disease Control and Prevention: HIV Among Transgender People. 2017. Available at www.cdc.gov/hiv/pdf/group/gender/transgender/cdc-hiv-transgender-factsheet.pdf Accessed January 8, 2018.
- Pitasi MA, Oraka E, Clark H, et al.: HIV testing among transgender women and men—27 states and Guam, 2014–2015. *MMWR Morb Mortal Wkly Rep* 2017;66:883–887.
- Reisner SL, Veters R, White JM, et al.: Laboratory-confirmed HIV and sexually transmitted infection seropositivity and risk behavior among sexually active transgender patients at an adolescent and young adult urban community health center. *AIDS Care* 2015;27:1031–1036.
- Bradford J, Reisner SL, Honnold JA, Xavier J: Experiences of transgender-related discrimination and implications for health: Results from the Virginia Transgender Health Initiative Study. *Am J Public Health* 2013;103:1820–1829.
- Grant JM, Mottet LA, Tanis J, et al.: *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington, DC: National Center for Transgender Equality and the National Gay and Lesbian Task Force, 2011.
- Shires DA, Jaffee K: Factors associated with health care discrimination experiences among a national sample of female-to-male transgender individuals. *Health Soc Work* 2015;40:134–141.
- Cruz TM: Assessing access to care for transgender and gender nonconforming people: A consideration of diversity in combating discrimination. *Soc Sci Med* 2014;110:65–73.
- Macapagal K, Bhatia R, Greene GJ: Differences in healthcare access, use, and experiences within a community sample of racially diverse lesbian, gay, bisexual, transgender, and questioning emerging adults. *LGBT Health* 2016;3:434–442.
- Maragh-Bass AC, Torain M, Adler R, et al.: Risks, benefits, and importance of collecting sexual orientation and gender identity data in healthcare settings: A multi-method analysis of patient and provider perspectives. *LGBT Health* 2017;4:141–152.
- Nuttbrock L, Bockting W, Rosenblum A, et al.: Gender abuse, depressive symptoms, and HIV and other sexually transmitted infections among male-to-female transgender persons: A three-year prospective study. *Am J Public Health* 2013;103:300–307.
- Brennan J, Kuhns LM, Johnson AK, et al.: Syndemic theory and HIV-related risk among young transgender women: The role of multiple, co-occurring health problems and social marginalization. *Am J Public Health* 2012;102:1751–1757.
- Bariola E, Lyons A, Leonard W, et al.: Demographic and psychosocial factors associated with psychological distress and resilience among transgender individuals. *Am J Public Health* 2015;105:2108–2116.
- Bockting WO, Miner MH, Swinburne Romine RE, et al.: Stigma, mental health, and resilience in an online sample of the US transgender population. *Am J Public Health* 2013;103:943–951.
- Corliss HL, Belzer M, Forbes C, Wilson EC: An evaluation of service utilization among male to female transgender youth: Qualitative study of a clinic-based sample. *J LGBT Health Res* 2007;3:49–61.
- Poteat T, German D, Kerrigan D: Managing uncertainty: A grounded theory of stigma in transgender health care encounters. *Soc Sci Med* 2013;84:22–29.
- Sanchez NF, Sanchez JP, Danoff A: Health care utilization, barriers to care, and hormone usage among male-to-female transgender persons in New York City. *Am J Public Health* 2009;99:713–719.
- Snelgrove JW, Jasudavicius AM, Rowe BW, et al.: “Completely out-at-sea” with “two-gender medicine”: A qualitative analysis of physician-side barriers to providing healthcare for transgender patients. *BMC Health Serv Res* 2012;12:110.
- MacCarthy S, Reisner SL, Nunn A, et al.: The time is now: Attention increases to transgender health in the United States but scientific knowledge gaps remain. *LGBT Health* 2015;2:287–291.
- Bowers JR, Branson CM, Fletcher JB, Reback CJ: Predictors of HIV sexual risk behavior among men who have sex with men, men who have sex with men and women, and transgender women. *Int J Sex Health* 2012;24:290–302.
- Escudero DJ, Kerr T, Operario D, et al.: Inclusion of trans women in pre-exposure prophylaxis trials: A review. *AIDS Care* 2015;27:637–641.
- Schein AI, Santos GM, Arreola S, et al.: Inequities in access to HIV prevention services for transgender men: Results of a global survey of men who have sex with men. *J Int AIDS Soc* 2016;19:20779.
- Wansom T, Guadamuz TE, Vasan S: Transgender populations and HIV: Unique risks, challenges and opportunities. *J Virus Erad* 2016;2:87–93.

30. Human Rights Campaign Foundation: Transgender people and HIV: What we know. 2011. Available at http://hrc-assets.s3-website-us-east-1.amazonaws.com//files/images/issues/WorldAidsDay_Document.pdf Accessed January 9, 2018.
31. Smalley KB, Warren JC, Barefoot KN: Differences in health risk behaviors across understudied LGBT subgroups. *Health Psychol* 2016;35:103–114.
32. Fenway Health: Glossary of gender and transgender terms. 2010. Available at http://fenwayhealth.org/documents/the-fenway-institute/handouts/Handout_7-C_Glossary_of_Gender_and_Transgender_Terms__fi.pdf Accessed January 9, 2018.
33. Harbin A, Beagan B, Goldberg L: Discomfort, judgment, and health care for queers. *J Bioeth Inq* 2012;9:149–160.
34. Kuper LE, Nussbaum R, Mustanski B: Exploring the diversity of gender and sexual orientation identities in an online sample of transgender individuals. *J Sex Res* 2012;49:244–254.
35. Gaither TW, Awad MA, Osterberg EC, et al.: Impact of sexual orientation identity on medical morbidities in male-to-female transgender patients. *LGBT Health* 2017;4:11–16.
36. Herek GM: A nuanced view of stigma for understanding and addressing sexual and gender minority health disparities. *LGBT Health* 2016;3:397–399.
37. National LGBT Health Education Center. Taking routine histories of sexual health: A system-wide approach for health centers. 2015. Available at www.lgbthealtheducation.org/wp-content/uploads/COM-827-sexual-history_toolkit_2015.pdf Accessed March 22, 2018.
38. Cavanaugh T. Sexual health history: Talking sex with gender non-conforming and trans patients. n.d. Available at <http://fenwayhealth.org/wp-content/uploads/Taking-a-Sexual-Health-History-Cavanaugh-1.pdf> Accessed March 22, 2018.
39. Culp L, Caucci L: State adolescent consent laws and implications for HIV pre-exposure prophylaxis. *Am J Prev Med* 2013;44:S119–S124.
40. Kitts RL: Barriers to optimal care between physicians and lesbian, gay, bisexual, transgender, and questioning adolescent patients. *J Homosex* 2010;57:730–747.
41. Fisher CB, Fried AL, Desmond M, et al.: Facilitators and barriers to participation in PrEP HIV prevention trials involving transgender male and female adolescents and emerging adults. *AIDS Educ Prev* 2017;29:205–217.
42. Andrasik MP, Yoon R, Mooney J, et al.: Exploring barriers and facilitators to participation of male-to-female transgender persons in preventive HIV vaccine clinical trials. *Prev Sci* 2014;15:268–276.
43. Grant RM, Sevelius JM, Guanira JV, et al.: Transgender women in clinical trials of pre-exposure prophylaxis. *J Acquir Immune Defic Syndr* 2016;72:S226–S229.
44. Napper LE, Fisher DG, Reynolds GL: Development of the perceived risk of HIV scale. *AIDS Behav* 2012;16:1075–1083.
45. D’Augelli AR, Hershberger SL, Pilkington NW: Lesbian, gay, and bisexual youth and their families: Disclosure of sexual orientation and its consequences. *Am J Orthopsychiatry* 1998;68:361–371.
46. Fordham University: Relay: Research and education for LGBT and allied youth. Available at www.facebook.com/lgbtrelay Accessed January 7, 2018.
47. Sharma A, Wang LY, Dunville R, et al.: HIV and sexually transmitted disease testing behavior among adolescent sexual minority males: Analysis of pooled youth risk behavior survey data, 2005–2013. *LGBT Health* 2017;4:130–140.
48. Kurtz SP, Buttram ME: Misunderstanding of pre-exposure prophylaxis use among men who have sex with men: Public health and policy implications. *LGBT Health* 2016;3:461–464.
49. Miner MH, Bocking WO, Romine RS, Raman S: Conducting internet research with the transgender population: Reaching broad samples and collecting valid data. *Soc Sci Comput Rev* 2012;30:202–211.
50. Curtis BL: Social networking and online recruiting for HIV research: Ethical challenges. *J Empir Res Hum Res Ethics* 2014;9:58–70.
51. Guss C, Shumer D, Katz-Wise SL: Transgender and gender nonconforming adolescent care: Psychosocial and medical considerations. *Curr Opin Pediatr* 2015;26:421–426.
52. Cahill SR, Baker K, Deutsch MB, et al.: Inclusion of sexual orientation and gender identity in stage 3 meaningful use guidelines: A huge step forward for LGBT health. *LGBT Health* 2016;3:100–102.
53. Society for Adolescent Health and Medicine: Recommendations for promoting the health and well-being of lesbian, gay, bisexual, and transgender adolescents: A position paper of the Society for Adolescent Health and Medicine. *J Adolesc Health* 2013;52:506–510.
54. Braun HM, Garcia-Grossman IR, Quiñones-Rivera A, Deutsch MB: Outcome and impact evaluation of a transgender health course for health profession students. *LGBT Health* 2017;4:55–61.

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