Social Support, Exposure to Violence and Transphobia, and Correlates of Depression Among Male-to-Female Transgender Women With a History of Sex Work

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Objectives. We determined racial/ethnic differences in social support and exposure to violence and transphobia, and explored correlates of depression among male-to-female transgender women with a history of sex work (THSW).

Methods. A total of 573 THSW who worked or resided in San Francisco or Oakland, California, were recruited through street outreach and referrals and completed individual interviews using a structured questionnaire.

Results. More than half of Latina and White participants were depressed on the basis of Center For Epidemiologic Studies Depression Scale scores. About three quarters of White participants reported ever having suicidal ideation, of whom 64% reported suicide attempts. Half of the participants reported being physically assaulted, and 38% reported being raped or sexually assaulted before age 18 years. White and African American participants reported transphobia experiences more frequently than did others. Social support, transphobia, suicidal ideation, and levels of income and education were significantly and independently correlated with depression.

Conclusions. For THSW, psychological vulnerability must be addressed in counseling, support groups, and health promotion programs specifically tailored to race/ethnicity. (*Am J Public Health.* 2011;101:1980–1988. doi:10.2105/AJPH.2010.197285)

The term "transgender" has been used as an umbrella term, capturing people who do not conform with a binary male–female gender category.[1] In this study, we use the term "transgender women" or "male-to-female transgender women" to describe individuals who were born biologically male but self-identify as women and desire to live as women.[2] Although transgender persons or those who identify their gender other than male or female have been historically reported in many cultures around the world, their social roles, status, and acceptance have varied across time and place.[3] In the United States, as part of the gay rights movement in the 1970s, a transgender civil rights movement emerged to advocate for transgender people's equal rights and to eradicate discrimination and harassment in their daily lives.[4] However, transphobia—institutional, societal, and individual-level discrimination against transgender persons—is still pervasive in the United States and elsewhere. It often takes the form of laws, regulations, violence (physical, sexual, and verbal), harassment, prejudices, and negative attitudes directed against transgender persons.[5–7]

Studies have reported that transgender persons lack access to gender-sensitive health care[6,8,9] and often experience transphobia in health care and treatment.[5,9] Transgender persons are frequently exposed to violence, sexual assault, and harassment in everyday life, mainly because of transphobia.[5–7,9–11] Physical and sexual assaults and violence, and verbal and nonphysical harassment, derive from various perpetrators (e.g., strangers, acquaintances, partners, family members, and police officers). Transgender persons suffer from assaults, rape, and harassment at an early age, and these experiences persist throughout life.[1] A number of studies have examined violence and harassment against sexual minorities, although these have mainly focused on gay men.[12–15] A limited literature has described the prevalence of violence, transphobia, and health disparities among transgender persons.[7–9]

Psychological indicators such as depression and suicidal ideation and attempts have been reported among transgender persons.[5,6,10,16–18] Transgender women of color, such as African Americans, Latinas, and Asians/Pacific Islanders (APIs), are at high risk for adverse health outcomes because of racial/ethnic minority status and gender identity,[6] as well as for depression through exposure to transphobia.[19] Although transgender persons have reported relatively high rates of using basic health care services,[20] gender-appropriate mental health services are needed,[5] particularly among African Americans.[21] A lack of social support, specifically from the biological family, is commonly reported among transgender persons and is associated with discomfort and lack of security and safety in public settings.[22] Sparse research exists on social support among transgender persons, although such support could ameliorate adverse psychological consequences associated with transphobia and also mitigate racial discrimination for transgender persons of color.

Because of relatively high rates of unemployment, lack of career training and education, and discrimination in employment, many transgender women engage in sex work for survival.[23,24] Sex work is linked to high-risk situations, including substance abuse, unsafe sex, and sexual and physical abuse.[25] Physical abuse, social isolation, and the social stigma associated with sex work exacerbate transgender women's vulnerability to mental illness and HIV risk.[5,17] High HIV seroprevalence rates among transgender women have been reported,[5,20,26–28] particularly among racial/ethnic minorities,[5] substance users,[27] and sex workers.[20,24,25,29–31] Transgender women of color face multiple adversities, such as racial and gender discrimination; transphobia; economic challenges including unemployment, substance abuse, HIV and other sexually transmitted infections; and mental

illness. However, few studies have investigated racial/ethnic differences in psychological status among transgender women of color in relation to social support and exposure to transphobia.

To develop culturally appropriate and transgender specific mental health promotion programs, we describe the prevalence of violence, transphobia, and social support in relation to racial/ethnic background among transgender women with a history of sex work (THSW). We also investigated the role of social support and exposure to transphobia on participants' levels of depression.

METHODS

The inclusion criteria for recruiting study participants were as follows: (1) self-reported gender identity as a transgender or transsexual woman (pre- or postoperative); (2) aged 18 years or older; (3) self-identified as African American, API, Latina, or White; and (4) self-reported exchange of sex for money or drugs at some time in the past. The study had 2 cohorts of THSW: (1) 332 (112 African Americans, 110 APIs, and 110 Latinas) who were recruited in San Francisco, California, from November 2000 to July 2001 and (2) 241 (118 Whites in San Francisco and 123 African Americans in Oakland, California) recruited from August 2004 to July 2006. The creation of 2 cohorts was a function of research funding in 2 different time periods. Before recruitment of each cohort, focus groups were conducted to understand THSW's health, substance use, and HIV risk behaviors in social and cultural contexts.[31]

We recruited about half of study participants through referrals from collaborating AIDS service organizations. We mapped the areas in San Francisco and Oakland where transgender women congregated and socialized or engaged in soliciting customers for commercial sex. The remaining participants were recruited from direct outreach at the targeted areas identified by mapping. The recruitment procedures for the first cohort of the study have been described elsewhere.[29] The recruitment procedures for the second cohort were similar to those of the first cohort, but only African Americans and Whites who resided in Oakland and San Francisco, respectively, were targeted. After obtaining informed consent, trained interviewers who were transgender women conducted individual interviews using a structured questionnaire. A Spanish translation of the questionnaire was used for Latina participants who preferred Spanish. The interview lasted approximately 1 hour. Most interviews were conducted by matching the race/ethnicity of participants and interviewers. Upon completion of the interview, the participants received cash reimbursement, a safe-sex kit, and a resource guide for transgender persons that listed community resources and services.

Measurements

The interview measurements included exposure to violence, harassment, and transphobia; social support; depression (as determined by the Center For Epidemiologic Studies Depression Scale [CES-D][32]; $\alpha=0.95$); and suicidal ideation and suicide attempts over the lifetime. Exposure to violence (physical assault and rape or sexual assault) was measured in lifetime and 2 different time periods (younger than 18 years vs 18 years old or older). The transphobia scale, which was modified from a homophobia scale,[33] consisted of 11 items measuring frequencies of harmful or detrimental experiences caused by living as or transitioning to being a woman in 2 time periods (aged 12–18 years vs ≥18 years [$\alpha=0.82$]).[34] For example, participants were asked to answer the following using a 5-point frequency scale (never to almost daily): "Between ages of 12 and 18, how often were you made fun of or called names for being transgender or effeminate?" The modified social support scale[35,36] measured the needs for 5 different types of social support ($\alpha=0.69$), the frequency of receiving social support from family, transgender friends, and nontransgender friends during the past 30 days ($\alpha=0.72$–0.76), and satisfaction with that social support ($\alpha=0.83$–0.85). Background information, such as ethnicity, age, education, income, sex work in the past 6 months, housing situation, gender identity, sexual orientation, and sexual reassignment surgery, was collected.

Data Analyses

We used the χ^2 test and analysis of variance (ANOVA) to analyze the association between racial/ethnic group and (1) background variables, depression, and suicidal ideation; (2) exposure to violence by types of perpetrator; and (3) experience of transphobia. The CES-D is widely used to measure depressive symptoms,[37] and scores of 16 or higher suggest clinically significant depression[38,39] and predict clinical depression in validation studies.[40–42] We categorized the nominal transphobia scale into 3 groups for bivariate analyses. We used the means of the composite scores of the 11-item transphobia scale (range=0–4, converted from 5-point Likert scale) in a multiple regression analysis. We performed a multiple regression analysis on the CES-D (continuous variable; range=0–60), simultaneously entering social support, transphobia, and background measures. We calculated the composite measures of the activities of and satisfaction with social support on the basis of the means of 3 sources of social support. All analyses were conducted with SPSS 15.0 (SPSS Inc, Chicago, IL).

Participants

There were significant differences by demographic variables among racial/ethnic groups (Table 1). Two thirds of the participants were older than 30 years, and Whites were older than other groups. More than 80% of Latinas and APIs were born outside of the United States. Nearly 60% of the participants earned less than $1000 a month. More than half of the participants reported having income from sex work during the past 6 months.

RESULTS

A significantly higher proportion of Latina, White, and African American participants than of APIs were categorized as being depressed (≥16 on CES-D; Table 1). Overall, more than half of the participants reported having thought of committing suicide, with higher rates among Whites and African Americans than among other groups. Among those having had suicidal ideation, 61% reported having attempted suicide, although no significant group differences were found. Participants who had ever had suicidal ideation were more likely to be depressed (63.8%) than those who had never had ideation (36.2%) ($\chi^2=64.3$, $P<.01$; not shown).

Exposure to Physical Assault and Rape or Sexual Assault

Half of the participants reported having been physically assaulted (Table 1). Almost all

TABLE 1—Demographic Characteristics of Study Participants and Their Experience of Physical and Sexual Violence: San Francisco and Oakland, CA, 2000–2001 and 2004–2006

	African American (n = 235), % (Total No.)	Latina (n = 110), % (Total No.)	Asian/Pacific Islander (n = 110), % (Total No.)	White (n = 118), % (Total No.)	Total (n = 573), % (Total No.)	χ^2
Demographic characteristics						
Age,[a] y	35.1 (234)	33.0 (110)	32.9 (110)	39.4 (118)	35.1 (572)	
Immigrants	3.8 (235)	81.8 (110)	86.4 (110)	5.1 (118)	34.9 (573)	380.81**
Highest education level	(235)	(110)	(110)	(118)	(573)	104.40**
Less than high school	31.5	60.9	18.2	17.8	31.8	
High school, GED, technical or vocational school	40.0	26.4	18.2	34.7	32.1	
Some college	20.0	8.2	43.6	29.7	24.3	
College and above	8.5	4.5	20.0	17.8	11.9	
Monthly income in past 30 d, $	(230)	(108)	(108)	(117)	(563)	97.13**
0–499	13.9	33.3	12.0	29.9	20.6	
500–999	48.7	32.4	22.2	35.0	37.7	
1000–1999	28.3	13.9	22.2	24.8	23.6	
≥2000	9.1	20.4	43.5	10.3	18.1	
Did sex work in past 6 mo	50.6 (235)	71.8 (110)	31.8 (110)	61.0 (118)	53.2 (573)	39.03**
Housing situation in past 6 mo	(233)	(107)	(110)	(118)	(568)	47.90[b]**
Permanent housing	46.8	43.0	61.8	38.1	47.2	
Temporary housing	39.1	45.8	35.5	33.9	38.6	
Halfway house or treatment center	5.2	4.7	1.8	3.4	4.0	
Homeless (shelter, street)	6.4	5.6	0.9	16.9	7.4	
Other	2.6	0.9	0	7.6	2.8	
Gender identity	(233)	(110)	(110)	(116)	(569)	73.30**
Female	36.1	10.9	57.3	55.2	39.2	
Preoperative transgender or transsexual	54.5	70.0	28.2	32.8	48.0	
Other	9.4	19.1	14.5	12.1	12.8	
Sexual orientation	(227)	(108)	(110)	(117)	(562)	141.08[c]**
Heterosexual	77.5	81.5	85.5	40.2	72.1	
Homosexual	12.3	13.0	10.9	8.5	11.4	
Bisexual	8.8	5.6	3.6	35.0	12.6	
Other	1.3	0	0	16.2	3.9	
Had sexual reassignment surgery	5.1 (234)	8.2 (110)	15.5 (110)	4.2 (118)	7.5 (572)	13.79**
Depression (CES-D)	(233)	(109)	(106)	(117)	(565)	39.56**
<16	52.4	35.8	75.5	41.9	51.3	
≥16	47.6	64.2	24.5	58.1	48.7	
Suicidal ideation	64.1 (231)	45.5 (110)	28.2 (110)	74.1 (116)	55.6 (567)	60.93**
Attempted suicide	60.0 (145)	67.3 (49)	51.6 (31)	64.0 (86)	61.4 (311)	2.34
Physical and sexual assault						
Ever physically assaulted, not including rape	41.6 (231)	40.9 (110)	35.5 (110)	89.7 (117)	50.2 (568)	93.45**
By primary partner or spouse	43.5 (92)	36.4 (44)	30.8 (39)	54.3 (105)	44.6 (280)	8.26*
By customer, trick, john	35.9 (92)	29.5 (44)	28.2 (39)	47.6 (105)	38.2 (280)	7.20
By family member other than spouse	22.2 (90)	9.1 (44)	17.9 (39)	66.7 (105)	36.3 (278)	69.33**
By friend	21.1 (90)	13.6 (44)	7.7 (39)	40.0 (105)	25.2 (278)	22.48**
Raped or sexually assaulted, younger than 18 y	39.7 (229)	37.3 (110)	11.9 (109)	57.8 (116)	37.6 (564)	51.17**
By primary partner or spouse	7.1 (84)	9.8 (41)	0.0 (13)	6.0 (67)	6.8 (205)	1.60
By customer, trick, john	29.1 (86)	12.2 (41)	0.0 (13)	23.9 (67)	22.2 (207)	8.54[d]*

Continued

TABLE 1—*Continued*

By family member other than spouse	51.8 (85)	43.9 (41)	23.1 (13)	52.2 (67)	48.5 (206)	4.45
By friend	26.5 (83)	29.3 (41)	7.7 (13)	34.3 (67)	28.4 (204)	4.06
Raped or sexually assaulted, adult	29.9 (231)	22.7 (110)	16.4 (110)	48.7 (117)	29.8 (568)	32.17**
By primary partner or spouse	16.4 (67)	8.0 (25)	16.7 (18)	21.8 (55)	17.0 (165)	2.36
By customer, trick, john	55.9 (68)	36.0 (25)	50.0 (18)	58.9 (56)	53.3 (167)	3.98
By family member other than spouse	12.3 (65)	0.0 (25)	0.0 (18)	11.1 (54)	8.6 (162)	5.59
By friend	18.2 (66)	24.0 (25)	11.1 (18)	14.5 (55)	17.1 (164)	1.61

Note. CES-D = Center for Epidemiologic Studies Depression Scale; GED = General Educational Development certificate.
[a]F = 12.83 ($P < .01$).
[b]$\phi = 0.29$.
[c]$\phi = 0.50$.
[d]$\phi = 0.20$.
*$P < .05$; **$P < .01$.

Whites reported having been a victim of physical violence. Among those who reported physical assault, nearly half and more than one third had been assaulted by their primary partners or spouses and by other family members, respectively. Whites and African Americans were more likely to have reported physical assaults than were other groups. More than one third reported physical assaults by commercial sex customers, but there was no significant group difference.

More than one third of the participants had been raped or sexually assaulted before they were 18 years old; APIs reported the lowest incidence. Nearly one quarter had been raped or sexually assaulted by male customers. Victimization was reported more frequently by African Americans and Whites than by Latinas and APIs. Similar rates of rape or sexual assault during adulthood were reported, although more White participants (about half) reported this than did other groups. Among the participants who reported rapes or sexual assaults in adulthood, more than half indicated that the perpetrators were male customers.

Exposure to Transphobia

Overall, more than two thirds of the participants reported having been ridiculed or embarrassed by their family members because of their transgender identity or expression (Table 2). About half of the participants reported experiences of transphobia because of their gender identity or appearance. These included losing a job or career opportunities, avoiding family members or friends who harassed them, and hiding transgender identity to be accepted by others. Overall, fewer API participants reported these transphobia experiences.

Exposure to transphobia was pervasive during adolescence (aged 12–18 years) as well as adulthood. Participants reported being made fun of or being a victim of jokes during adolescence because of gender identity or expression. Almost all participants reported having had difficulties in handling verbal harassment, but more difficulties were reported among African Americans, Latinos, and Whites than among APIs. Moreover, nearly half of the participants reported being a victim of physical violence during adolescence. Almost all participants cited difficulties in dealing with physical abuse in adolescence, particularly Whites and African Americans. As an adult, more than three quarters of the participants had been exposed to transphobia, such as hearing that transgender women are abnormal, being made fun of, called names, or being a victim of jokes; more than three quarters reported having had difficulties in dealing with verbal harassment. One quarter of the participants were physically assaulted in adulthood because of their gender identify or appearance. White and Latina participants reported physical assaults more often than did African Americans and APIs; however, almost all participants reported having had difficulties in dealing with physical assaults in adulthood.

Social Support

Overall, Whites and Latinas reported significantly higher needs for social support than did other participants (Table 3). Study participants reported receiving little support from their biological family members or from friends, either transgender or nontransgender. The levels of social support received from family were higher among African Americans and APIs than among Whites and Latinas. Participants reported receiving social support more frequently from their transgender or nontransgender friends than from families. However, compared with Latinas and APIs, more African Americans and Whites received support from nontransgender friends. Overall, participants expressed satisfaction with social support, but Latina and White participants reported higher levels of dissatisfaction with social support from all sources than did African Americans and APIs.

Correlates of Depression

A multiple regression analysis showed that depression was significantly correlated with needs for, activities of, and satisfaction with social support; transphobia; suicidal ideation; Latina versus API ethnicity ($P = .09$); level of income in the past 30 days; and education ($R^2 = 0.41$; $F_{13,521} = 27.8$; $P < .01$; Table 4). Study participants who expressed higher needs for social support, had less frequently received social support, were dissatisfied with social support, had more frequent transphobia experience, had ever had suicidal ideation, or had lower levels of income or education were more likely to report depressive symptoms on the CES-D than were others. We entered 3 interaction terms (transphobia

TABLE 2—Experience of Transphobia Among Male-to-Female Transgender Women With a History of Sex Work, by Race/Ethnicity: San Francisco and Oakland, CA, 2000–2001 and 2004–2006

	African American (n = 235), Total No. or %	Latina (n = 110), Total No. or %	Asian/Pacific Islander (n = 110), Total No. or %	White (n = 118), Total No. or %	Total (n = 573), Total No. or %	χ^2
In general						
Family hurt and embarrassment	216	105	108	110	539	32.61**
Never	31.0	35.2	46.3	20.0	32.7	
Once or twice, a few times	40.7	41.9	36.1	32.7	38.4	
Many times	28.2	22.9	17.6	47.3	28.9	
Job or career opportunity losses	231	109	106	112	558	53.78**
Never	71.4	53.2	55.7	34.8	57.5	
Once or twice, a few times	19.9	33.9	41.5	46.4	32.1	
Many times	8.7	12.8	2.8	18.8	10.4	
Movement away from friends or family	231	109	110	116	566	26.72**
Never	56.3	35.8	51.8	31.0	46.3	
Once or twice, a few times	31.2	45.0	35.5	50.9	38.7	
Many times	12.6	19.3	12.7	18.1	15.0	
Hiding transgender identity to be accepted by others	230	109	106	116	561	28.68**
Never	41.7	49.5	68.9	55.2	51.2	
Sometimes	40.4	38.5	15.1	33.6	33.9	
Almost daily	17.8	11.9	16.0	11.2	15.0	
Harassment by the police	233	109	109	115	566	22.46**
Never	30.0	40.4	35.8	36.5	34.5	
Sometimes	57.1	56.9	62.4	59.1	58.5	
Almost daily	12.9	2.8	1.8	4.3	7.1	
Between ages 12 and 18 y						
Heard others claim that transgender persons were abnormal	224	107	106	117	554	16.06*
Never	23.7	24.3	38.7	21.4	26.2	
Sometimes	42.9	47.7	43.4	52.1	45.8	
Almost daily	33.5	28.0	17.9	26.5	28.0	
Victim of jokes	229	109	107	117	562	24.39**
Never	15.3	11.9	29.9	16.2	17.6	
Sometimes	48.5	50.5	48.6	37.6	46.6	
Almost daily	36.2	37.6	21.5	46.2	35.8	
Handling of being target of jokes	193	96	74	97	460	33.09*
Not difficult	5.2	13.5	14.9	4.1	8.3	
A little or somewhat difficult	43.5	37.5	47.3	21.6	38.3	
Extremely difficult	51.3	49.0	37.8	74.2	53.5	
Victim of physical violence	228	109	109	115	561	71.52**
Never	49.1	40.4	88.1	45.2	54.2	
Sometimes	42.1	55.0	11.9	43.5	39.0	
Almost daily	8.8	4.6	0.0	11.3	6.8	
Handling of being target of physical violence	116	65	13	63	257	13.34[a]*
Not difficult	1.7	4.6	7.7	0.0	2.3	
A little or somewhat difficult	38.8	35.4	38.5	19.0	33.1	
Extremely difficult	59.5	60.0	53.8	81.0	64.6	

Continued

TABLE 2—*Continued*

			As an adult			
Heard others claim that transgender persons were abnormal	221	108	108	117	554	30.09**
Never	29.4	22.2	38.0	10.3	25.6	
Sometimes	57.9	63.9	57.4	71.8	61.9	
Almost daily	12.7	13.9	4.6	17.9	12.5	
Victim of jokes	219	109	108	116	552	66.48**
Never	30.6	19.3	49.1	6.0	26.8	
Sometimes	63.9	65.1	46.3	78.4	63.8	
Almost daily	5.5	15.6	4.6	15.5	9.4	
Handling of being target of jokes[b]	151	88	55	109	403	14.14*
Not difficult	28.5	13.6	23.6	17.4	21.6	
A little or somewhat difficult	41.7	56.8	60.0	55.0	51.1	
Extremely difficult	29.8	29.5	16.4	27.5	27.3	
Victim of physical violence	232	109	107	113	561	56.51[b]**
Never	80.2	59.6	94.4	57.5	74.3	
Sometimes	19.4	39.4	5.6	40.7	25.0	
Almost daily	0.4	0.9	0.0	1.8	0.7	
Handling of being target of physical violence	46	44	6	48	144	13.23[c]*
Not difficult	8.7	0.0	0.0	6.3	4.9	
A little or somewhat difficult	21.7	52.3	33.3	27.1	33.3	
Extremely difficult	69.6	47.7	66.7	66.7	61.8	

[a]$\phi = 0.23$.
[b]$\phi = 0.32$.
[c]$\phi = 0.30$.
*$P < .05$; **$P < .01$.

multiplied by needs for, activities of, and satisfaction with social support) into the equation, but no significant correlations emerged; we therefore dropped them from the final model.

DISCUSSION

The current study confirmed previous studies' findings that transgender women have been exposed to transphobia, physical and sexual violence, and daily harassment because of their gender identity or appearance.[1,5-7,9,10] In addition, the study revealed significant racial/ethnic group differences among participants in the exposure to violence and harassment,

TABLE 3—Social Support Among Male-to-Female Transgender Women With a History of Sex Work, by Race/Ethnicity: San Francisco and Oakland, CA, 2000–2001 and 2004–2006

	African American (n = 235), Mean (Total No.)	Latina (n = 110), Mean (Total No.)	Asian/Pacific Islander (n = 110), Mean (Total No.)	White (n = 118), Mean (Total No.)	Total (n = 573), Mean (Total No.)	F
Need for social support[a]	1.82 (231)	1.95 (109)	1.53 (108)	2.09 (117)	1.84 (565)	32.99**
Social support received from family members[b]	1.47 (228)	1.29 (110)	1.37 (109)	1.28 (117)	1.38 (564)	3.98**
Social support received from transgender friends[b]	2.00 (228)	1.75 (110)	1.75 (109)	1.99 (117)	1.90 (564)	4.07**
Social support received from nontransgender friends[b]	1.91 (230)	1.56 (110)	1.46 (109)	2.24 (117)	1.82 (566)	24.55**
Satisfaction with social support from family members[c]	2.50 (222)	2.20 (106)	2.59 (102)	2.24 (112)	2.40 (542)	12.55**
Satisfaction with social support from transgender friends[c]	2.57 (223)	2.04 (108)	2.61 (105)	2.24 (114)	2.40 (550)	33.70**
Satisfaction with social support from nontransgender friends[c]	2.54 (224)	2.14 (108)	2.66 (103)	2.36 (111)	2.45 (546)	21.76**

[a]Range = 1–3 (1 = "not at all"; 2 = "need a little"; 3 = "need quite a bit").
[b]Range = 1–5 (1 = "never"; 5 = "almost every day").
[c]Range = 1–3 (1 = "need a lot more"; 2 = "need a little more"; 3 = "it was about right").
*$P < .05$; **$P < .01$.

TABLE 4—Multiple Regression Analysis on Depression Among Male-to-Female Transgender Women With a History of Sex Work: San Francisco and Oakland, CA, 2000–2001 and 2004–2006

Variables	Depression (n = 535)		
	Standardized B	*t*	*P*
Ethnicity (vs Asian/Pacific Islander)			
African American	0.03	0.38	.71
Latina	0.08	1.68	.09
White	0.06	0.93	.35
Age	–0.03	–0.95	.35
Immigrant (vs born in United States)	0.07	1.15	.25
Education level[a]	–0.12	–3.01	< .001
Income (past 30 d)[b]	–0.09	–2.59	.01
Transgender or other gender identity (vs female)	0.06	1.52	.13
Suicidal ideation[c]	0.25	6.58	< .001
Need for social support[d]	0.16	3.05	< .001
Social support received[e]	–0.08	–1.91	.06
Satisfaction with social support[f]	–0.09	–2.05	.04
Transphobia[g]	0.26	6.55	< .001

Note. $R^2 = 0.41$, $F_{13,521} = 27.8$, $P < .01$.
[a]Range = 1–4 (1 = less than high school; 4 = college degree or more).
[b]Range = 1–7 (1 = $0–$250; 7 = $4000 or more).
[c]Range = 0–1 (0 = no and 1 = yes to the question, "Have you ever thought about committing suicide?").
[d]Range = 1–3 (1 = "not at all"; 3 = "need quite a bit").
[e]Range = 1–5 (1 = "never"; 5 = "almost every day").
[f]Range = 1–3 (1 = "need a lot more"; 3 = "it was about right").
[g]Range = 0–4 (0 = "never" to 4 = "many times"; converted from 5-point Likert scale answers of 1 = "never" to 5 = "almost daily").

transphobia, and the levels of perceived difficulties in handling verbal harassment and physical violence. The exposure to transphobia was ubiquitous in the adolescent and current adult lives of the participants, and the majority cited difficulty in dealing with exposure to transphobia, particularly physical and sexual assaults. Having a history of physical and sexual abuse appeared to be strongly linked to current mental health. Current depressive symptoms were independently and significantly correlated with the exposure to transphobia, higher needs for and dissatisfaction with social support, and lower levels of receiving social support. Despite the limitation inherent in a cross-sectional study design, these study findings provide practical guidelines for community-based interventions to alleviate the impact of violence and transphobia for THSW, as well as for transgender adolescents who may engage in sex work because of social and economic constraints.

We found it alarming that almost all White participants reported having been physically assaulted, and that more than half of Whites reported having been raped or sexually assaulted in adolescence as well as in adulthood. Participants reported fewer physical assaults during their adulthood than during adolescence; however, they reported that overcoming the psychological and physical consequences of victimization in childhood and adolescence continued to be extremely difficult. Overall, one third of the participants reported daily verbal harassment in adolescence and extreme difficulties in handling the harassment; however, the perception of difficulty in handling verbal harassment seemed to be eased in adulthood. This finding may be a result of survival skills acquired over time or relocation from somewhat confined adolescent environments to transgender-friendly environments (e.g., San Francisco). Many THSW may have developed strengths from learning to ignore verbal harassment and to confront and educate harassers about social justice for transgender persons.

Physical and sexual assaults, however, seem to persistently damage THSW, physically and psychologically, and to leave posttraumatic effects, and those who report frequent exposure to transphobia, particularly physical and sexual assaults, need special attention. Adolescents who are transitioning from boy to girl or questioning their gender may be able to learn life skills from adult transgender women who have survived exposure to transphobia, violence, depression, and other health problems. An intervention study to develop mentoring programs for transitioning transgender adolescents is urgently needed. Also, an urgent need exists for longitudinal studies to assess effects of exposure to violence, harassment, and transphobia and its impact on mental health from childhood to adulthood.

We did not collect data on reporting physical and sexual assaults to police; however, studies among transgender persons have indicated low rates of reporting any incidents to police.[43–45] About half of transgender persons did not tell anyone about sexual assaults,[43] and 11% feared possible abuse by the medical and legal systems.[45] Considering that more than two thirds of the participants reported harassment by police, their exposure to physical and sexual assaults was unlikely to be reported, particularly when assaults occurred in relation to sex work or if the perpetrators were spouses or relatives.

This study found that about half of the participants who were raped or sexually assaulted in adolescence were victimized by family members. In adulthood, the perpetrators were more often commercial sex partners. Thus, an urgent need exists to develop age-appropriate violence prevention programs. For example, violence prevention programs could provide adolescent THSW with information about the possible risks of sexual assault from their friends and family members, as well as clients if they engage in sex work, and the strategies to avoid or flee from specific perpetrators.

On the basis of our experience in providing services to transgender persons,[18] we found that some transgender sex workers on the streets provide their friends with support for preventing violence or harassment from customers. The existing support networks among sex workers could be used for developing violence prevention programs. In addition, it is necessary to link high-risk THSW with local support groups and

hate crime prevention programs. National coalitions for promoting the health of and preventing violence against THSW are needed because unique issues (e.g., sex work, gender transition, transphobia, and social support) have to be addressed. In addition, transgender sensitivity programs must be implemented at law enforcement agencies, so that THSW can seek help from police officers when they are physically or sexually assaulted.

High prevalence rates of suicidal ideations and attempts were reported among transgender women.[10,46] This study showed that a high proportion of Latina and White participants reported depressive symptoms, and that those who had ever had suicidal ideation were more likely to be depressed than were those who had not. The study also showed that depression was significantly and independently correlated with transphobia, social support, suicidal ideation, Latina ethnicity, and lower income and education levels. These findings, particularly for Latina THSW, need special attention. We do not know in what ways Latina ethnicity contributed to levels of depression, but combined effects of younger age and lower levels of education and income might account for the observed depression scores among Latinas. A discrepancy was also found among Latinas between the need for social support and levels of support received. Latina THSW might strongly feel the loss of support from their extended family because of immigration. Community empowerment programs for Latina THSW, such as redeveloping positive social support networks to compensate the loss of family support, need to be considered.

A recent study showed that the prevalence rate of suicide attempts was 32% among transgender persons in San Francisco, and that suicide attempts were significantly correlated with age (younger than 25 years), depression, having a history of enrolling in substance abuse treatment programs, sexual victimization, and gender-based discrimination.[10] The study participants with a history of suicidal ideation reported frequent exposure to transphobia and expressed higher needs for social support ($P<.01$; not reported in Results), as well as depressive symptoms. The exposure to physical and sexual violence, combined with a lack of social support, seems to have long-lasting detrimental effects on mental health. Mental health treatment and suicide prevention programs need to be developed, particularly for THSW who have attempted suicide. For example, brief assessment tools could be developed and used at health care and social service settings to evaluate transgender clients' depression, risk for suicide or self-harm, trauma from physical and sexual assaults, and use of health care and social support. Particularly for transgender adolescents who are questioning or transitioning, brief assessments can be used for screening at intake and for referral services to mental health treatment and other appropriate programs.

The extrapolation of study findings to transgender women in the general population is not feasible because the current study targeted THSW and participants were recruited through purposive sampling. In addition, response biases caused by social desirability and retrospective memory must be considered. Like this study, studies in public health tend to overemphasize risk factors and health disparities among transgender persons. Population-based research studies are needed to describe and understand the lives of transgender persons who have been historically neglected and stigmatized. However, future research must also look for protective factors or resilience against transphobia, violence, and mental health problems, and implement intervention studies that reinforce existing community strengths to improve health and well-being. ■

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This article was accepted August 31, 2010.

Contributors

T. Nemoto conceptualized, designed, and implemented the study, supervised data analyses, responded to reviewers' comments, and completed the article. M. Iwamoto and B. Bödeker contributed to data analysis and drafting versions of the article.

Acknowledgments

This study was supported by National Institute on Drug Abuse (grant R01 DA011589; Tooru Nemoto, principal investigator).

We thank the transgender women who participated in the study and the collaborating community-based agencies and project staff for their contribution to implementing the study. We are also grateful to the reviewers' comments and suggestions regarding the article.

Note. The contents of this article are solely the responsibility of the authors and do not necessarily represent the official views of the National Institute on Drug Abuse.

Human Participant Protection

This study was approved by the Committee on Human Research, University of California, San Francisco.

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