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Suicide risk factors among trans feminine individuals in Lebanon

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Abstract

Transgender women are disproportionately affected by high rates of depression and suicide attempts. It is therefore important to identify factors that influence suicidal risk, particularly in the Middle East where little research has examined the mental health of transgender women. We examined risk factors associated with suicide attempts among 54 trans feminine individuals in Beirut, Lebanon. Data were collected using interviewer-administered questionnaires and analyzed using bivariate statistics. Twenty-five (46%) participants reported having ever attempted suicide. Among them, only one participant received some kind of counseling in response to the attempted suicide. Low general social support, low social integration, and low support from peers were significantly associated with a history of attempted suicide, as were being more open about transgender identity in public and any hormone use (past or current). These findings suggest that progression in gender transition can have unintended consequences related to mental health and suicide risk, while social support systems can mitigate the impact of mental health problems. Some of these findings mirror other contexts around the globe and can inform mental health services for trans feminine individuals in Lebanon, the greater Middle East region, and other international settings.

Keywords

Trans feminine; suicide; mental health; Middle East; Lebanon; MENA

Background

It is well established that transgender women are disproportionately affected by high rates of depression (42-64%) (Clements-Nolle, Marx, & Katz, 2006; Shipherd et al., 2010; Gonzalez et al., 2012; Budge, Adelson, & Howard, 2013) and suicide attempts (31-41%)(Clements-Nolle, Marx, Guzman, & Katz, 2001; Clements-Nolle et al., 2006; Herbst et al., 2008) in the

U.S. where most studies among transgender women have been conducted. Indeed, among patients at a community health center in Massachusetts, 29% of transgender individuals reported having ever attempted suicide compared to 9% of non-transgender individuals (Reisner, White, Bradford, & Mimiaga, 2014). Rates of suicide-related events among U.S. transgender veterans were found to be twenty times higher than rates among the general veteran population (Blosnich et al., 2013). Similarly, in a U.S. national survey of 6,450 transgender and gender non-conforming individuals, 41% of participants reported attempting suicide compared to 2% of the general population (Grant et al., 2011). In a study of transgender women with a history of engaging in sex work in the U.S., more than half reported a history of suicide ideation and 61% of these women had attempted suicide (Nemoto, Bödeker, & Iwamoto, 2011).

Factors that contribute to suicide attempts among transgender youth in the U.S. include experiences of past parental verbal and physical abuse and lower body esteem (Grossman & D'Augelli, 2007). Among transgender individuals in San Francisco, age (under age 25), depression, a history of substance use treatment, a history of forced sex, gender-based discrimination, and gender-based victimization were independently associated with suicide attempts (Clements-Nolle et al., 2006). Suicide attempts were associated with younger age (15-22 years) in a sample of transgender individuals in Virginia (Xavier, Honnold, & Bradford, 2007). Conversely, social support from friends, social support from family, and optimism were inversely associated with suicidal attempts and accounted for 33% of the variance in suicidal behavior among a sample of transgender adults in Canada (Moody & Smith, 2013). Among transgender women with a history of sex work in the San Francisco Bay Area, White and African American women were more likely to report having had suicidal thoughts compared to participants of other races/ethnicities (Nemoto, Bödeker, & Iwamoto, 2011).

Recent data that explore suicide attempts within transgender communities from outside North America are more limited. Researchers in New Zealand found that one in five transgender youth had attempted suicide (Clark et al., 2014). Among young transgender women in Thailand, younger age (15-19 years) was associated with higher levels of suicide ideation compared to older participants (20-25 years) in the sample (Yadegarfard, Ho, & Bahramabadian, 2013). Despite such staggering rates of suicide attempts around the globe, researchers have yet to understand how best to prevent suicide among transgender women. It is therefore imperative to conduct in-depth research to explore pathways to suicidal behavior (Haas et al., 2010) and to identify factors that impact risk (Moody & Smith, 2013) in order to address the needs of transgender women.

Very few data are available that examine transgender women's mental health in the Middle East. One of the only existing studies found that transgender women in Lebanon experience threats to their emotional safety due to lack of support from family, friends, and community (Kaplan et al., 2014), as is the case, but perhaps to a lesser or different degree, in other settings. A recent Human Rights Watch report details the abuses that transgender women suffer in Kuwait at the hands of police (2012). Prior to these publications, health research among populations in the Middle East has often erroneously conflated transgender women and men who have sex with men (MSM) (Mumtaz et al., 2010). Similarly, societal and legal

perspectives of transgender women in the Middle East often mistakenly situate transgender women as the same as or similar to MSM (El Feki, 2013). For example, physical proximity to and conflation with MSM during raids of "gay-friendly" nightclubs in Lebanon has led to arrests among transgender women (Marwan, 2013).

Within the Middle East, Lebanon is known as a more "open," "tolerant," and "progressive" country compared to many of its neighbors. Its capital is often portrayed in the media as a relatively safe place for the local gay community and as a desirable holiday destination for gay individuals within the region (Bedford, 2012; El Feki, 2013). However, it was not until 2009 that a judge deemed Lebanon's long-standing Article 534, which penalizes "unnatural" sexual relations and had previously been used against MSM, as inapplicable to "same-sex" relations (El Feki, 2013). Then in 2014, another judge ruled that the same article was not relevant in a case against a transgender woman (Benoist, 2014). In this historic ruling, the judge indicated that the individual's gender should not be determined solely based on her legal identification card, but instead on her self-perception and presentation. Human rights advocates are cautious, however, about viewing this ruling as a step toward progress due in part to the fact that the Lebanese legal system is modeled after French civil law and therefore the rulings of 2009 and 2014 are not precedents; rather these two cases could remain anecdotal unless other judges rule in the same way (Benoist, 2014). Further, legal changes would not necessarily dictate cultural and social acceptance for individuals' everyday experiences (El Feki, 2013).

A wide range of scholarly views, religious perspectives, and actual practices exist across the Middle East region about gender confirmation surgery (also known as sex reassignment surgery); the debate hinges mainly on whether surgeries "amount to 'changing' the way a person was created by God or carrying out a 'correction'" (Whitaker, 2006, p. 167). A lack of religious consensus and the diversity of cultures and religions in the region allow for some flexibility (Whitaker, 2006). Conflicting reports exist about the legality of obtaining gender confirmation surgery in Lebanon (Anderson, 2011; Saleh & Qubaia, 2015); however, it is established that genital surgery is the only way for transgender people to be able to change their legal identification cards in the region (Anderson, 2011). Transgender women experience tremendous difficulty finding employment in Lebanon due in part to physical appearance not matching their legal documentation (El Feki, 2013; Kaplan et al., 2014). Although being transgender is not illegal in Lebanon per se, transgender women face discrimination, harassment, and violence in school, work, and while navigating public spaces (Kaplan et al., 2014; Anderson, 2011; Saleh & Qubaia, 2015). Given this complex context that prioritizes male privilege (El Feki, 2013), it is important to examine the factors that threaten the mental health of transgender women in Lebanon. Obtaining data on the prevalence of and factors related to mental health problems and suicidal behavior among transgender women is essential to being able to strategize ways in which symptoms can be appropriately and effectively addressed. To date, although transgender women are regarded as being at high risk for psychological stress and mental health problems, suicidal behavior among transgender women had not yet been studied in the Middle East. Therefore, we

¹Syria, Bahrain, and Morocco have similar laws that penalize "sexual intercourse against nature" (El Feki, 2013).

examined prevalence as well as risk and protective factors associated with suicide attempts among trans feminine individuals² in Beirut, Lebanon.

Methods

Study Design

Formative work (Kaplan et al., 2014) that engaged the community was conducted prior to the implementation of this study. Long chain referral sampling was used to recruit the sample between May and December of 2012. Eligibility criteria consisted of being assigned male sex at birth and currently identifying as a woman or trans, age 18 years or older, fluent in English or Arabic, and residing in greater Beirut. Recruitment began with 5 persons designated as "seeds," who were identified from community organizations working with trans women and study consultants. All participants, including seeds, received four recruitment coupons to recruit members of their social network, resulting in multiple waves of participants. Participants were instructed to give a coupon to eligible trans feminine peers who were interested in participating, and to inform the recruit to call the study coordinator for coupon verification, eligibility screening, verbal consent procedures, and scheduling of an interview. The coupons were uniquely coded to link participants to their survey responses and for monitoring who recruited whom and reimbursement of participants for recruitment of peers. Participants were given \$30 for completing the interview and were told that they would receive \$10 for each peer recruit (up to 4) who enrolled in the study; hence a total of up to \$70 could be earned by each participant. Referrals were provided to participants if a desire for mental health services was expressed. Individuals gave oral consent prior to participation. Institutional Review Boards at the RAND Corporation and Lebanese American University reviewed and approved this study.

Measures

The survey was administered in English or Arabic, depending on the preference of the participant, with computer-assisted interview software. The survey was developed in English and translated into Arabic using standard translation and back translation methods.

Demographic and background characteristics—These included age, education level, current work status, country of birth, citizenship status, income, hormone use, and current relationship status (being in a committed relationship or not).

Depression—The 9-item Patient Health Questionnaire (PHQ-9) was used to measure the presence of depressive symptoms over the past 2 weeks. Each of the 9 items corresponds to the symptoms used to diagnose depression according to DSM-V criteria; responses to each item range from 0 'not at all' to 3 'nearly every day.' All participants were first asked the first two items of the scale (PHQ-2), which relate to depressed mood and loss of interest in activities that are normally pleasurable; those who scored > 2 (a standard cutoff for determining the possible presence of depression) were then asked the remaining 7 items. For

²Because not all participants identified as transgender women, we refer to the sample population as "trans feminine individuals" as a more inclusive and accurate term.

those who were asked all 9 items, item scores were summed and scores 9 correspond highly to major depression (Kroenke, Spitzer, & Williams, 2001).

Suicidal ideation and attempts—Participants were asked if they had "ever thought about or attempted suicide." Response options included 'Never,' 'It was just a brief passing thought,' 'I have had a plan at least once to kill myself but did not try to do it,' 'I have had a plan at least once to kill myself and really wanted to die,' 'I have attempted to kill myself but did not want to die,' and 'I have attempted to kill myself and really hoped to die.' The latter two responses constituted a history of suicidal attempts for the purpose of creating a dichotomous variable that was used in the analysis.

General social support and social isolation—Items from the Social Relationship Scale (O'Brien, Wortman, Kessler, & Joseph, 1993) were adapted to assess these variables. Three items from the Availability of Social Support subscale were used to measure *general social support*; participants were asked about access to someone for emotional (to talk to about personal problems), caregiver (when sick or unable to care for self), and tangible (e.g., money, transport) support. Response options range from 1 'definitely not' to 5 'definitely yes', with a mean item calculated and higher scores representing greater support; Cronbach's alpha = .74. Two items from the Subjective Social Integration subscale were used to measure degree of *social isolation*; participants were asked if they felt "isolated from others" and "no one really knows you well." Response options ranged from 1 'no, never' to 5 'yes, all the time'; a mean item score was calculated, with higher scores representing greater isolation; Cronbach's alpha = .62.

Peer support—This was measured by a single item developed for this study. Participants were asked to rate how supportive their friends are of the participant's transgender identity on a scale of 1 'not at all supportive' to 6 'very much supportive.'

Gender identity openness—Transgender community integration was measured with two items adapted from the Reactions to Homosexuality Scale (Smolenski, Diamond, Ross, & Rosser, 2010) that assessed the degree of being open about being transgender in one's personal life and at work or school (in separate items), and a single item adapted from the MyLife MyStyle Study (Bingham, 2012) in which participants reported their level of comfort in expressing their gender identity through their physical appearance in public (e.g. walking in the streets or going to restaurants). The response format for all three items ranged from 0 'none' to 4 'completely'; the mean item score was calculated and higher scores represent greater openness about being transgender; Cronbach's alpha = .74.

Data Analysis

Because of the relatively small sample size, we have opted to use unadjusted (raw data) estimates in our analysis. Two-tailed independent t-tests (for continuous measures) and Chi Square tests (for binary or categorical variables) were used to examine bivariate correlates of having any history of attempted suicide.

Results

Sample Description

Fifty-four trans feminine individuals comprised the study sample. The average age in our sample was 27 years, with a range of 18 to 58 years. The majority of the sample was born in Lebanon and/or had legal status in the country. Most participants had limited education with 58% not having completed high school. Two-thirds of participants reported current sex work (67%). One third of participants was in a committed relationship with a male partner (35%). Participants in the sample had undergone a range of physically feminizing procedures from none to hormone and silicone use to gender confirmation surgery. Table 1 provides a summary of sample demographics.

Prevalence of Depression and Suicide Attempts

Thirty-eight participants (70%) scored greater than 2 on the PHQ-2 and were administered the full PHQ-9; of the 38, thirty-three (66% of the total sample) participants scored greater than 9 and were classified as currently depressed. Regarding suicidal behavior, 21 (39%) reported never having suicidal thoughts, 8 (15%) had only passing thoughts of suicide, 3 (6%) had a suicidal plan at least once but never attempted to carry it out, and 25 (46%) reported having attempted suicide. Of the 25 who had made a suicidal attempt, only 1 participant reported receiving some kind of counseling in response to this event.

Correlates of Suicide Attempts

History of attempted suicide was significantly associated with lower general social support, lower social integration, and lower support from peers, as well as being more open about transgender identity in public and any hormone use (past or current). While depression was not significantly related to suicide attempts, 55% of those with a history of suicide attempts had depression symptoms compared to about 33% of those without such attempts. Table 2 provides a summary of suicide attempt correlates.

Discussion

Due to limited existing knowledge about the mental health of trans feminine individuals in the Middle East, some of our results are surprising and posed difficulties with interpretation. For example, participants were asked how open they were about being transgender within different domains of their lives, including within personal/social life, at work/school, and in public. The results revealed a significant association between participants being open about their transgender identity in public and suicide attempts. There is a possibility that the participants interpreted relevant questions in different ways. Because participants in the sample had undergone a range of physically feminizing procedures from none to hormone and silicone use to gender confirmation surgery, being open about transgender identity in public likely meant different things to different individuals, depending in part, on how their appearances were "read" or "clocked" by others. Participants may have felt that they didn't have control over whether people in public were aware of their being transgender. It would not be surprising if participants who felt that they had less control over others' knowledge of their transgender identity had poorer mental health than those who felt they had more

control or more "success" being recognized as a woman, if being recognized as a woman was desired. Further, participants were not asked whether they lived as women full-time; it is therefore also possible that they interpreted the concept of "public" differently. In other words, being in public to some might have connoted being in public during the day whereas others might have been reflecting on being in public at night when answering the questions; for some, going out during the day versus at night impacts gender presentation. These nuances make interpretation challenging and suggest the need for further study.

Because of the stigma and discrimination that trans feminine individuals experience in Lebanon (Kaplan et al., 2014), we anticipated that recruitment would pose considerable challenges. However, given the total population size of Lebanon (approximately 4 million) and the estimates of the prevalence of male-to-female transgenderism in other countries of 1:11,900 to 1:45,000 (WPATH, 2012), our sample size of 54 in fact represents a sizable proportion of likely 88 to 336 trans feminine individuals country-wide. Social desirability bias is a potential limitation of the data. Open discussions about mental health and suicide can be challenging in any setting, but particularly difficult in one in which individuals tend to express psychological concerns through somatic or physical complaints as is the case in Lebanon where physical symptoms are more socially acceptable than emotional (Zeitounalian, n.d.). Therefore, it is possible that participants' responses were impacted by social desirability, in which case mental health symptoms and suicide behavior may have been underreported.

This study represents the first effort to quantify the prevalence of suicide behavior among trans feminine individuals in the Middle East, in addition to identifying factors associated with suicide risk in Beirut, Lebanon. The prevalence rate of reported suicide attempts in the present study (46%) compared to the reported rate in the general Lebanese population of 2% (Weissman et al., 1999) is consistent with the results from existing research among transgender women in other settings (Clements-Nolle, Marx, Guzman, & Katz, 2001; Clements-Nolle et al., 2006; Herbst et al., 2008; Grant et al., 2011). The rate of depression in the present study (66%) is similar to rates of depression among transgender women in other settings (42-64%) (Clements-Nolle, Marx, & Katz, 2006; Shipherd et al., 2010; Gonzalez et al., 2012; Budge, Adelson, & Howard, 2013). These staggeringly high and disproportionate rates of depression and suicide attempts necessitate effective strategies for ensuring individuals' ability to cope with mental health stressors and symptoms.

Although over one third of the sample reported a history of suicide attempts, only one participant reported seeking counseling or treatment after having attempted suicide. In the Middle East, stigma is a barrier for individuals seeking mental health treatment (Gearing, Brewer, Schwalbe, MacKenzie, & Ibrahim, 2013). In fact, among a sample of university students in Lebanon, formal healthcare seeking behavior for psychological concerns was exceedingly low at 3% (El Kahi, Abi Rizk, Hlais, & Adib, 2012). Additionally, women in the Middle East may tend to delay seeking formal healthcare and instead opt for self-prescribed medications and home treatments due to gendered socio-cultural roles, financial concerns, and perceptions about quality of care and health needs (Majaj, Nassar, & De Allergi, 2013). Women in the region may also prioritize seeking healthcare for physical symptoms over psychological symptoms (Kabakian-Khasholian, Shayboub, & Ataya, 2014).

As in many other regions around the globe, in the Middle East, transgender people experience high levels of social stigma due to gender presentation and sexual behavior (Mumtaz et al., 2010; Kaplan et al., 2014). Within a culture dominated by male and cisgender privilege (El Feki, 2013), trans feminine individuals likely experience unique barriers to healthcare seeking behavior.

Similar to results from Canada (Moody & Smith, 2013), low general social support, low social integration, and low support from peers about gender identity were significantly associated with a history of attempted suicide in the present study. Accordingly, general social support, including family acceptance, and social integration represent potential entry points for suicide prevention and intervention among trans feminine individuals. Results from the National Transgender Discrimination Survey (NTDS) in the U.S. indicate that family acceptance has a protective effect against many threats to well-being including suicide as well as HIV infection (Grant et al., 2011). The importance of social support and integration in mitigating the effects of depression and suicidal behavior is not a surprising finding given the Lebanese context and culture, which prioritizes the integral role that family plays in an individual's overall well-being and health (Kaplan et al., 2014).

Unlike the results from the United States (Clements-Nolle et al., 2006; Grant et al., 2011), a history of sexual abuse and engagement in sex work were not significantly associated with suicide attempts in the present study. Further, significant variation in suicide attempts found in other studies by age (Xavier, Honnold, & Bradford, 2007; Grant et al., 2011), education, homelessness, relationship status (Grant et al., 2011), and a history of sexual abuse (Testa et al., 2012) were not observed in the present study. A lack of correlation between depression and suicide attempts was likely due to low power of the study.

Some of these findings suggest that progression in gender transition can have unintended consequences related to mental health. Specifically, the results indicated that past or current hormone use was significantly associated with a history of suicide attempt. This finding presents some challenges to interpretation because previous research indicates an improvement of mental health among transgender women following feminizing procedures (Weyers et al., 2009). In other words, feminizing procedures can enable transgender women to take steps toward aligning an outward appearance with an internal concept of female gender identity, which can result in a decrease of mental health symptoms. The use of crosssex hormones, when taken as prescribed, can result in decreased growth of body hair, breast growth, redistribution of fat, and reduced testicular volume (Moore, Wisniewski, & Dobs, 2003). However, for some transgender women, there are no noticeable effects of hormones (WPATH, 2012). Therefore, for transgender women who self-prescribe without guidance about adherence, dosage, and potential effects from a licensed healthcare provider, hormones may not have the desired effects. In fact, participants in the sample who used hormones not prescribed by a doctor were more likely to have a history of suicide attempt, but the association was not significant. The association between suicide attempt and past or current hormone use/misuse among the sample of participants in Lebanon may reflect dissatisfaction of the effects of hormones, whether taken as prescribed or not. For example, if participants were not informed about the typical time it takes before the possibility of seeing results of the hormones, mental health symptoms may have been exacerbated by the

gap between expectation and effect. On the other hand, if the effects of the hormones were noticeable to others in the participants' environments and reactions to such changes were negative, this may have impacted their mental health. These possible explanations need to be explored qualitatively to determine the contextual links between hormone use, and other feminizing procedures, and suicidal behavior.

Social support systems can mitigate the impact of mental health problems and serve as a protective factor or source of resilience for suicide prevention. These findings can inform health service providers in Lebanon and other countries in the Middle East and facilitate the development of strategies to address poor mental health and suicide prevention among trans feminine individuals within a context in which health-seeking behavior, particularly for mental health concerns, is not the norm for women. These results indicate the need for improved access to healthcare among trans feminine individuals in Lebanon in order to ensure appropriate and culturally relevant treatment of gender dysphoria and mental health symptoms.

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Table 1

Demographics of participants (n=54)

	n	(n=54)
Age (sd)		27 (9.3)
Born in Lebanon	47	87%
Legal in Lebanon	53	98%
No current income	28	52%
Current sex for income	36	67%
Years using sex for income (sd)	36	7.2 (6.4)
Identifies as a sexual escort	21	39%
Earn <\$500 per month	22	42%
In a committed relationship (all partners were male)	19	35%
Relationship less than a year	11	58%
Living with someone	37	69%
Living with parents or family	22	60%
Highest education level		
Didn't complete high school	31	57%
Completed high school	14	26%
Some college	6	11%
Graduated college	3	6%
Currently in school	8	15%

Table 2

Correlates of Suicide Attempts

	Attempted Suicide			
	YES (n=25)	NO (n=29)	p-value	
General social support	2.72 (1.28) (n=25)	3.74 (0.97) (n=29)	0.002	
Social isolation	3.78 (1.17) (n=25)	2.90 (0.99) (n=29)	0.004	
Support from peers	2.32 (2.69) (n=29)	4.24 (2.18) (n=29)	0.006	
Gender identity openness	2.28 (1.62)	1.45 (1.43)	0.05	
Hormone use (past/present)	64.0% (16/25)	31.0% (9.29)	0.028	
Depression	54.5% (18/33)	33.3% (7/21)	0.166	