Transgender/gender nonconforming adults' worries and coping actions related to discrimination: Relevance to pharmacist care

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Purpose. Transgender/gender nonconforming (TGNC) adults' worries and coping actions related to discrimination by healthcare professionals were evaluated.

Methods. A community-led participatory approach was used to develop, implement, and analyze the survey. Respondents were recruited using a snowball recruitment method. The questionnaire measured population demographics, health status, worry about discrimination, perceptions of health professional competency in gender-affirming care, and actions taken to cope with discrimination. Analysis used mainly descriptive methods and chi-square analysis, where appropriate.

Results. There were 316 usable responses from a total of 325 responses. The typical respondent was young, white, lived within the Midwest and in urban/suburban areas. About half had college degrees and 41.7% had annual household incomes of less than $25,000. High degrees of depression risk and anxiety were reported along with low self-reported health status. Most used pharmacist services with 41.6% reporting worry about discrimination associated with such services. About half (52.5%) reported pharmacists as having very little or no competency in providing gender-affirming care. Common coping actions included delayed seeking of healthcare and non-disclosure of authentic gender identity. Thirteen percent of respondents avoided healthcare because of perceived purposeful embarrassment experienced at a pharmacy.

Conclusion. Worry about discrimination from pharmacists was common among TGNC adults and was associated with high levels of anxiety. The majority perceived pharmacists to lack competency in transgender care.

Keywords: gender identity, gender nonconforming, pharmacist, patient care, transgender

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It is estimated that 1.4 million individuals (0.6%) within the U.S. are transgender/gender nonconforming (TGNC).[1] There is some evidence that this population is growing in number and in recognition. Recent surveys reported that nearly 3% of Minnesota 9th and 11th graders identify as TGNC[2] and 12% of Millennials identify as such.[3]

Despite the growing visibility of the TGNC community, they continue to face societal challenges and are at risk for lack of social acceptance, verbal and physical violence, homelessness, hiring and employment discrimination, and social isolation.[4-13] Estrangement from family members and faith communities may occur.[7,8,14,15]

Discrimination is linked to poor health.[8,12,16-18] TGNC individuals are at risk for HIV and substance abuse disorders.[19] Lifetime depression rates as high as 62% have been reported in studies of TGNC individuals[20,21] compared with

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7.6% in the general U.S. population.[22] The 2015 U.S. Transgender Survey of 27,715 TGNC adults found that 40% of respondents had attempted suicide at least once in their lifetime compared to a U.S. suicide attempt rate of about 4.6%.[8] While the U.S. 12-month prevalence of anxiety is reported to be 18.1%,[23] Budge and associates[24] reported that anxiety rates within the TGNC population range from 26% to 47.5%. Results from the 2014 Behavioral Risk Factor Surveillance Survey found that 22.9% of TGNC respondents reported fair or poor health compared with 16.9% of cisgender respondents (i.e., those whose sense of personal identification with gender corresponds with their gender assigned at birth).[13]

Despite the need for health services, the TGNC community faces multiple barriers to care.[25] They are less likely to have health insurance than heterosexual, lesbian, gay, or bisexual individuals.[7,8] The 2015 U.S. Transgender Survey found that "one-third (33%) of those who saw a health care provider had at least one negative experience related to being transgender, such as being verbally harassed or refused treatment because of their gender identity."[8] Others have also reported discrimination within healthcare settings.[6,7,8,26-30]

Discrimination may lead to delayed seeking needed healthcare and nondisclosure of TGNC identity.[8,27,28,31-33] The desire for hormone therapy coupled with lack of access to treatment causes some to turn to nontraditional health interventions and medications procured from the street or Internet, which may be of dubious safety and effectiveness.[30,32,34]

Despite the role of medications in transgender care, few descriptions of pharmacist-provided transgender health practices have been published.[35,36] One survey discovered little transgender healthcare training occurring within pharmacy schools,[37] and another found low self-reported competency levels among pharmacy residents.[38] While calls for pharmacists to become involved in transgender healthcare and research have been issued,[39–41] little is known about TGNC adults' perceptions of pharmacists or their experiences with pharmacist care. Elucidating such perceptions can inform actions needed to provide optimal patient care services. This manuscript offers insight into these issues by sharing pharmacist-relevant data collected through a survey of TGNC adults.

As part of a strategic planning process, a TGNC advocacy organization created an online survey for U.S. self-identified TGNC adults 18 years old or older that characterized worry and coping actions related to discrimination in home, social, schooling, workplace, and healthcare settings. The survey also measured perceptions about healthcare professional competency and gender-affirming care.

This article presents TGNC adults' perceptions about pharmacist transgender health competency and provision of gender-affirming care and compares those perceptions to those associated with primary care providers (PCPs) and transgender specialists. Data about actions taken to cope with discrimination in healthcare settings in general are presented, as these actions influence medication access and use and are pertinent to pharmacist care.

KEY POINTS

- Transgender/gender nonconforming (TGNC) individuals often face pervasive discrimination that translates into low socioeconomic status and poor health.
- Respondents associated pharmacists with worry about discrimination with the majority viewing pharmacists as having little or no competency in gender-affirming care.
- Embracing a broad definition of gender identity, understanding TGNC life experiences, and having clinical knowledge of transgender healthcare are essential for the provision gender-affirming care of TGNC individuals.

Methods

A survey was conducted using a community-led participatory approach with input from university researchers. An iterative formative process that included a TGNC-led core research group, 2 community focus groups, and multiple individual discussions between core researchers and TGNC community members was used to create the research objectives, questionnaire content, and recruitment process and guided data analysis, data interpretation and findings dissemination. The questionnaire was pilot tested and revised twice. Community-led research is advocated for marginalized groups to ensure that recognized community needs are addressed and that information salient to the community is gathered in a culturally appropriate manner.[42] Participatory research approaches can engender greater trust within the community studied, translating into greater study participation.[42–45] Such approaches also increase the cultural and internal validities of the findings and enhance community engagement in pursuant actions.[46]

Survey questionnaire. The survey questionnaire comprised multiple-choice questions, closed- and open-ended questions, validated scales, and questions developed via the formative process described above. Respondent characteristics measured included age, race, education, household income, and ZIP code. Gender-related life events were measured, including age at which authentic gender (i.e., the gender with which the individual internally identified with) was first realized, age at which respondents first told others about their authentic gender (social affirmation), and age at which medical interventions (e.g., hormone therapy) were started to affirm gender (medical affirmation). Gender was identified via an open-ended response to respect individual definitions of gender identity. No personal identifiers were requested. The research was deemed to be exempt from review by the university institutional review board.

Depression risk, generalized anxiety, and self-reported health status were measured. The Patient Health Questionnaire-2, a 2-item scale, screened for depression risk by measuring the frequency of depressed mood and anhedonia over the previous 2 weeks.[47] Scores range from 0 to 6; a cutoff score of 3 was used to designate high or low risk. The Generalized Anxiety Disorder-7 Scale measured anxiety with responses categorized as minimal, mild, moderate, and severe anxiety.[48] Self-reported health status was measured through the question: "Compared to other people your age, would you say your health is…?" Response options included "poor," "fair," "good," and "excellent."

Discrimination was defined in the same manner that the Everyday Discrimination Scale (Short Form)[49] defines discrimination and included being treated in any of the following ways: with less respect or receiving poorer service, as if you are not as smart as others, as if they are afraid or confused by you, or being threatened or harassed. Worry about discrimination was measured because worry was voiced as being relevant to daily quality of life.

Worry about discrimination associated with health professionals was measured via a question created through community input: "How worried are you about experiencing discrimination when seeing these professionals?" Response options included: "not at all," "very little," "somewhat," and "a lot." Health professional competency was measured with the question, "How competent are your healthcare providers in providing trans/gender-affirming care?" Response options included: "not at all," "very little," "somewhat," and "a lot." Respondents could indicate "not applicable" if they did not receive care from a given provider.

A list of commonly used actions to cope with healthcare discrimination was created from published literature[8,27,28,31-34] and community discussions. Coping-action use and helpfulness were measured with the following question, "How much do the following help you cope with discrimination in healthcare situations?" Response options included: "never tried this," "not at all," "very little," "some," and "a lot." Respondents were asked how often they avoided healthcare for selected reasons with response options: "never tried", "hardly ever," "sometimes," and "most/all of the time".

Population inclusion criteria and survey distribution. Survey eligibility included being a U.S. resident, 18 years old or older, and self-identifying as TGNC. A snowball recruitment method was used. This method is commonly employed in research for small populations that are difficult to identify and reach.[6–8] The survey was posted in a link on the advocacy organization's webpage. Participants were informed that answers were anonymous; they could forgo answering any question and could exit the survey at any point. No incentive was given for survey completion. Participants were encouraged to ask others to complete the survey. Local and regional lesbian, gay, bisexual, and transgender organizations notified their members about the survey, and flyers were distributed at their local events. Facebook ads were purchased to encourage participation. The survey was available online from June 2016 through November 2016.

Data analysis. Statistical analysis was completed using SPSS, version 24.0 (SPSS Statistics for Windows 2017, Armonk, NY) and SAS, version 9.4 for PC (SAS Institute Inc., Cary, NC). Descriptive and chi-square analyses were used, as appropriate. Patient Health Questionnaire-2 and Generalized Anxiety Disorder-7 responses were analyzed according to published guidelines.[47,48] All results were rounded to one-tenth; thus, some percentage results do not add to 100%. Median age is reported in lieu of the mean age due to skewed value distributions. The a priori level of significance was 0.05.

As part of the community-led research approach, the findings were shared with the TGNC community. Individual and group discussions plus a community forum captured perceptions of data validity and generated ideas for organizational actions based on the findings.

Results

A database of 325 responses was examined for completeness and conformity to inclusion criteria. Nine respondents were excluded due to a missing age or age younger than 18 years, residing outside the United States, or if the majority of data fields related to variables of interest were left blank. As not all respondents answered all questions, the number of responses may be less than 316 for a given item.

For gender-related life events, responses such as "since I was born" were recorded as an age of 2 years based on research findings that most children develop the ability to label gender groups between 18 and 24 months of age.[50] If an age range was given for an event, the youngest age was recorded. Table 1 summarizes survey participant demographic information. Respondents' age ranged from 18 to 67 years, with 81% of respondents younger than 45 years. Respondents tended to be white, college educated, and have low household incomes. ZIP code responses mapped to 33 states representing all geographic regions of the United States. Nearly half (48%) lived in the Midwest, and 87% lived in urban or suburban areas. More than 40 unique definitions of gender identity (e.g., trans female, male, bigender) were reported.

The median age at which individuals identified as TGNC was 18 years (range, 2–60 years). The median age for social affirmation was 21 years (range, 2–63 years), and the median age for beginning medical affirmation was 26 years (range, 11–64 years). A total of 298 respondents (94.3%) reported social affirmation of their gender, and 230 (72.8%) had medically affirmed their gender.

About one-fifth (21.2%) of respondents scored at a high risk for depression. Eighty-one percent reported anxiety symptoms (27.9% mild, 23.1% moderate, and 30.1% severe). Nearly half (45.2%) reported fair or poor health status.

Table 1. Demographic Variables of Study Respondents

Variable	Value
Median age, yr (*n* = 313)	27
Race/ethnicity, no. (%) (*n* = 313)	
White	252 (80.5)
Two or more races	37 (11.8)
Hispanic/Latino	9 (2.9)
African American	7 (2.2)
Native American	4 (1.3)
Asian	3 (1.0)
Native Hawaiian or other Pacific Islander	1 (0.3)
Highest attained education, no. (%) (*n* = 302)	
Less than high school degree	11 (3.5)
High school degree or GED	58 (18.6)
Some college, no degree	90 (28.9)
College degree (associate, baccalaureate, technical, graduate)	153 (49)
Annual household income, no. (%) (*n* = 279)	
<$10,000	42 (14.1)
$10,000–$24,999	82 (27.6)
$25,000–$49,999	80 (26.9)
$50,000–$99,999	42 (20.2)
$100,000 or more	33 (11.2)

Descriptive analysis assessed use of health professional services, worry about discrimination and perceived competency in gender-affirming care. Most respondents (86.2%) reported pharmacist service use. Slightly fewer (79.2%) used PCP services, and 41.4% reported receiving transgender specialist services.

Almost half (41.6%) of respondents indicated some or a lot of worry about discrimination associated with pharmacists (Table 2). This compared to 54.6% and 11.8% reporting this degree of worry about discrimination with PCPs or transgender specialists, respectively.

Chi-square analysis found that higher anxiety levels were related to greater worry about discrimination for each of these health professions ($p < 0.05$). Lower self-reported health status was associated with greater worry about discrimination with PCPs ($p < 0.05$), but no relationship was found for pharmacists or transgender specialists. No relationship was seen between worry about discrimination and depression risk.

Descriptive analysis revealed that 52.5% of respondents viewed pharmacists as having very little or no competency in providing gender-affirming care (Table 3). PCPs and transgender specialists were reported to have very little or no competency by 40.4% and 1.5% of respondents, respectively.

Table 4 indicates actions taken to cope with healthcare discrimination. Actions that were reported to help "some" or "a lot" were deemed helpful. Actions that could interfere with receiving appropriate care such as delaying healthcare and nondisclosure of authentic gender were used by 90.9% and 79.8% of respondents with 74.2% and 59.2%, respectfully, viewing these actions as helpful. Three fourths (74.6%) of respondents chose gender-affirming health professionals, and 92.1% viewed this action as helpful. Seeking advice from gender-affirming organizations and following advice from friends and others were reported by 66.4% and 66.7% respectively; however, the former was reported as more helpful (78.4% versus 48.5%). Almost half (46.4%) reported using natural products to avoid asking for a prescription, 19.7% reported getting prescriptions from family members or friends, and 19.0% got prescriptions from online pharmacies that did not require a prescription. These actions were deemed helpful in coping with discrimination by 40.1%, 21.7%, and 27.6% of respondents, respectively. Chi-square analysis found that predominant use of avoidant/passive coping actions was associated with greater anxiety ($p < 0.05$), depression risk ($p < 0.05$), and lower self-reported health status ($p < 0.05$).

Factors that led respondents to avoid healthcare are summarized in Table 5. Reasons for avoiding healthcare sometimes or most/all of the time included discomfort with physical exams (65.3%), inability to find gender-affirming medical providers (50.4%), and the lack of legal documents (e.g., driver's license) that reflected their authentic gender (50.5%). Medical and medication costs related to medical affirmation led to healthcare avoidance for 59.4% and 38.1% of respondents, respectively. Almost one-fourth (23.5%) reported avoiding healthcare due to past perceived purposeful embarrassment at a medical office, while past embarrassment at pharmacies led 13.3% to avoid healthcare sometimes or most or all of the time.

Community feedback indicated that the findings appropriately reflected their daily life experiences. Pharmacy-related findings elicited comments about being challenged about prescription legitimacy, refused prescriptions, and accused of prescription insurance fraud because of insurance card gender marker incongruence with physical appearance. Fear that pharmacy staff comments would be overheard by others and raise the risk for discrimination and physical harm was commonly expressed. Such fears contributed to the seeking of hormones from Internet and street sources.

Table 2. Discrimination Worry Associated With Selected Healthcare Professionals

	Discrimination Worry, No. (%) Respondents			
Variable	**Not at All**	**Very Little**	**Some**	**A Lot**
Pharmacists (*n* = 291)	91 (31.3)	79 (27.1)	85 (29.2)	36 (12.4)
Primary care providers (*n* = 289)	90 (31.1)	41 (14.2)	90 (31.1)	68 (23.5)
Transgender specialists (*n* = 194)	136 (70.1)	35 (18.0)	20 (10.3)	3 (1.5)

Table 3. Perceived Competency Associated With Selected Healthcare Professionals

	Perceived Competency, No. (%) Respondents			
Variable	**Not at All**	**Very Little**	**Some**	**A Lot**
Pharmacists (*n* = 225)	58 (25.8)	60 (26.7)	73 (32.4)	34 (15.1)
Primary care providers (*n* = 237)	49 (20.6)	47 (19.8)	58 (24.5)	83 (35.0)
Transgender specialists (*n* = 136)	0 (-)	2 (1.5)	24 (17.6)	110 (80.9)

Table 4. Use and Effectiveness of Selected Coping Actions

	No. (%) Respondents				
		Perceived Helpfulness by Percentage of Respondents Who Tried Actions			
Coping Action	**Tried Action**	**Not at All**	**Very Little**	**Some**	**A Lot**
Seeking healthcare only when absolutely necessary (*n* = 308)	280 (90.9)	24 (8.6)	48 (17.1)	83 (29.6)	125 (44.6)
Not disclosing that I am trans/gender nonconforming (*n* = 307)	245 (79.8)	61 (24.9)	39 (15.9)	61 (24.9)	84 (34.3)
Choosing providers known to be trans/gender affirming (*n* = 307)	229 (74.6)	8 (3.5)	10 (4.4)	58 (25.3)	153 (66.8)
Educating providers about trans health needs (*n* = 306)	218 (71.2)	40 (18.3)	49 (22.5)	80 (36.7)	49 (22.5)
Having someone accompany me to my visits (*n* = 306)	205 (67.0)	50 (24.4)	45 (22.0)	58 (28.3)	52 (25.4)
Following health/medication advice from friends and others (*n* = 306)	204 (66.7)	44 (21.6)	61 (29.9)	67 (32.8)	32 (15.7)
Seeking advice from gender-affirming groups/associations (*n* = 307)	204 (66.4)	19 (9.3)	25 (12.3)	87 (42.6)	73 (35.8)
Using natural products to avoid asking for a prescription (*n* = 306)	142 (46.4)	46 (32.4)	39 (27.5)	29 (20.4)	28 (19.7)
Seeking care from holistic healers rather than a physician (*n* = 305)	96 (31.5)	43 (44.8)	20 (20.8)	20 (20.8)	13 (13.5)
Getting prescriptions from friends or others at parties (*n* = 304)	60 (19.7)	43 (71.7)	4 (6.7)	10 (16.7)	3 (5.0)
Getting prescriptions from online pharmacies that do not require a prescription (*n* = 306)	58 (19.0)	33 (56.9)	9 (15.5)	11 (19.0)	5 (8.6)

Table 5. Frequency With Which Respondents Avoided Seeking Healthcare for Selected Reasons

Reason for Avoiding Care	No. (%) Respondents			
	Never Avoided for this Reason	Hardly Ever	Sometimes	Most/All of the Time
Uncomfortable about body being examined (*n* = 306)	49 (16.0)	57 (18.6)	87 (28.4)	113 (36.9)
Lack of legal documents indicating authentic gender (*n* = 196)	113 (57.5)	40 (12.9)	59 (19.1)	97 (31.4)
Can't afford costs related to medical affirmation (*n* = 310)	79 (25.5)	47 (15.2)	91 (29.4)	93 (30.0)
Can't find gender-affirming medical providers (*n* = 306)	78 (25.5)	74 (24.2)	95 (31.1)	59 (19.3)
Can't afford costs of medication related to medical affirmation (*n* = 310)	92 (29.7)	100 (32.3)	64 (20.7)	54 (17.4)
Purposively embarrassed by medical office personnel (*n* = 307)	152 (49.5)	83 (27.0)	50 (16.3)	22 (7.2)
Purposively embarrassed by pharmacy personnel (*n* = 308)	179 (58.1)	88 (28.6)	29 (9.4)	12 (3.9)

Discussion

The survey findings describe TGNC adults' perceptions of pharmacists and provide insight into how pharmacists' care may become more gender-affirming. Pharmacists' services were used by the majority (90%) of respondents and pharmacists were associated with less worry about discrimination than PCPs. Yet, 41.6% of respondents associated pharmacists with some degree of worry about discrimination and an even higher percentage of respondents viewed pharmacists as incompetent in providing gender-affirming care. Furthermore, greater worry about pharmacist discrimination was associated with greater anxiety severity. Responses related to worry about discrimination when seeing health professionals and perceptions of their competency were given by respondents who reported currently receiving services and by those who did not. However, differences in current service use may not be relevant since both experienced discrimination and perceptions of potential discrimination have been shown to influence TGNC individuals' use of healthcare services as well as health status.[12,18]

About 1 in 10 respondents reported that they avoided healthcare at least some of the time because of past experiences of embarrassment at a pharmacy. Community feedback suggested pharmacists lacked transgender healthcare knowledge, gender-affirming care skills and/or exhibited discriminatory attitudes towards TGNC individuals.

As reported by others,[28,30] our results show that PCPs and medical offices may also be perceived as not being gender affirming and lacking competency in transgender health. However, transgender specialists, who are likely to have advanced training and experience in transgender health, were viewed more favorably. These perceptual differences suggest that professional education in transgender health is a necessary underpinning to gender-affirming care. Many resources are available to support such learning,[51-60] including online training programs offered by organizations such as the National Center for Transgender Equality (https://transequality.org), Fenway Health (FenwayHealth.org), and Rainbow Health Ontario (https://www.rainbowhealthontario.ca). However, our community-led process revealed that the complexities of TGNC life, the pervasiveness and depth of discrimination faced and its impact on health and quality of life can only be understood through honest, open conversations with those who have lived through these experiences.

Consistent with other surveys,[7,8] gender identity was expressed in many unique terms, reinforcing that gender is a spectrum of identities that leads patients to seek different treatment goals.[61] The wide range of ages at which authentic gender recognition, social and medical affirmation occurred indicate the uniqueness of individual lives. Authentic gender was often recognized early in life, indicating that transgender healthcare lies within the realms of both pediatric and adult care.[2,51]

The majority of respondents reported low household incomes, similar to findings of other TGNC research.[6-8,26] The effect of financial instability was reflected in healthcare costs being reported as a barrier to care. Thus, medication therapy advice should consider financial resources, healthcare affordability, and linkages to needed social services.[35-39]

One fifth (21.2%) of respondents scored positive for depression risk, 31.1% had severe anxiety, and 45.2% reported fair or poor health status. Other studies have documented poor health outcomes in TGNC populations,[7,8,18,20,21,24] but the severity of anxiety and low self-reported health status found in this survey were alarming. Since life events and socioeconomic factors influence health and healthcare decisions,[33] skills in conversing with patients about past and present life situations, including suicide attempts, are needed.[11] Interventions

based on trauma-informed care principles may be particularly effective in improving health for this population.[52] Such principles promote patient empowerment, patient choice in treatment options, collaboration among the health team and patients, patient physical and emotional safety, and trust between patients and providers about treatment plans and care processes.

Coping actions taken and their reported helpfulness reflect the opportunity for coping counseling to be integrated into pharmacists' patient care plans. The majority of respondents delayed seeking healthcare (90.9%) and did not disclose that they were TGNC (79.8%). While the former can lead to health inequities and poor health outcomes,[18] the latter action hinders patient assessment and counseling and impedes the recognition of potential physical, mental health and socioeconomic concerns that may limit medication access and adherence. About 70% of respondents reported they had educated providers about transgender care, a burden reported by others.[8,24] One in 5 respondents turned to alternative medication sources such as the Internet to avoid discrimination. This discovery, also found by others,[30,32,34] was highlighted by community members as a common danger within the TGNC community. Such alienation from traditional healthcare highlights the opportunity for gender-affirming community-based pharmacists to serve as portals to evidence-based healthcare.

Nearly 75% coped by choosing gender-affirming providers; of those, 92.1% found this to be helpful. However, lack of access and knowledge about available gender-affirming providers is a barrier to care.[2,6-8,25-30,62,63] Thus, unless a pharmacist is recognized as gender-affirming, worry about discrimination may lead to avoidance of pharmacy services and non-disclosure of authentic gender. Since respondents often looked to advocacy organizations for advice, pharmacists should seek to foster relationships with such organizations. Signs of inclusivity within the pharmacy and use of patient-chosen names and pronouns are additional ways of conveying a safe environment for TGNC patients.[60]

Survey findings point to future research opportunities related to pharmacist–TGNC patient interactions. These include addressing questions such as the following: How can pharmacist knowledge about transgender healthcare be enhanced? What system changes can support gender-affirming pharmacist services? How can recognition of gender, preferred names, and pronouns be embedded into pharmacist practices and patient records systems? What interventions can pharmacists undertake to move individuals away from harmful self-care practices and toward the use of safer, more effective treatments?

Survey limitations may influence the degree to which results apply to the broader TGNC population. Use of a snowball recruitment method may have preferentially drawn those with stronger support networks, and more access to gender-affirming providers and those most vocal about their needs and concerns. It may also account for the lack of respondents who were older, who were persons of color, or who lived in rural areas. Our respondents were similar to the unweighted characteristics of the U.S. Transgender Survey,[8] respondents but were less diverse than the probability sample of 691 transgender respondents included in the 2014 Behavioral Risk Factor Surveillance Survey.[16] The similarities of samples captured through snowball recruitment methods indicate the daunting nature of outreach to individuals who face potential family, friend, and faith community rejection; physical violence; job and/or housing loss if identified as being TGNC. This fear may be present even though data were collected anonymously. Probability sampling within the TGNC population is rare[31]; nearly all population-based databases have historically measured gender as male/female.[64] Due to the relatively low numbers of TGNC individuals within the U.S. significant financial resources would be needed to conduct population-based sampling.[31]

A 1-time survey design did not allow directionality for variable relationships to be determined. The online survey process created barriers to those without Internet access and did not allow eligibility verification. Local environments and other factors not considered within the survey may have influenced responses. The validity of self-administered survey data is always imperfect due to question interpretation.

Conclusion

Worry about discrimination from pharmacists was common among TGNC adults and was associated with high levels of anxiety. The majority perceived pharmacists to lack competency in transgender care.

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Disclosures

The authors have declared no potential conflicts of interest.

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