

Trans and gender diverse people's experiences and evaluations with general and trans-specific healthcare services: a cross-sectional survey

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Abstract

Research into access to and experiences with healthcare services of gender diverse and trans individuals remains scarce. In this paper, self-reported experiences with general and trans-specific healthcare services were analyzed for differences between gender diverse people, trans men and trans women, using data from a five country survey. More than half of all respondents indicated they had delayed general healthcare services at least once because of their gender identity, with no differences between gender diverse and trans individuals, mostly out of fear of being treated badly. Almost one in four participants felt personally discriminated against in general healthcare services within the previous year. Gender diverse people had significantly less experiences with seeking trans-specific healthcare. Additional effects were found for different socio-demographic variables (age; sex assigned at birth, educational level; socio-economic status; and belonging to an ethnic, sexual, and/or disability minority). Gender diverse people gave significantly worse evaluations of trans-specific healthcare services (in general as well as for specific types of trans-specific healthcare). The findings highlight the need for healthcare providers in creating inclusive healthcare settings, with attention for gender diverse clients and those belonging to precarious minority groups due to their level of education or sexual, disability, and/or ethnic background.

Introduction

Gender diverse people are people who do not identify with the gender they were assigned at birth and also do not identify exclusively with a male or female gender (1). Gender diverse individuals are often grouped together with trans women and trans men under the term ‘transgender’, to refer to the larger group of people who do not, or to a lesser extent, identify with their sex assigned at birth.

Regarding the mental health of trans and gender diverse people, research comparing these groups is scarce and unclear. U.S survey research ($N = 5956$) that shows that gender diverse respondents have poorer mental health than trans men or trans women ($p < .01$) (2), but there is also U.S. survey research ($N = 2932$) showing that the trans men and trans women have a worse mental health status than the gender diverse population (with p -values ranging from .031 to $<.001$ for different health outcomes) (3). However, in both cases, the mental health of trans people is worse than that of the cisgender populations (4). The 2019 study of Burgwal, Gvianishvili (5), conducted with the same dataset as used for this paper, is consistent with Harrison, Grant (2), in that across four European countries, gender non-binary respondents scored significantly worse on self-reported health and general well-being, even when controlling for different socio-demographic variables, when compared with trans men and trans women.

This paper therefore aims to analyze access to, and experiences with, trans-specific healthcare services, as well as the evaluation of trans-specific healthcare by trans respondents, taking different socio-demographic variables and gender identities into account. It is hypothesized that gender diverse people will experience disadvantages such as discrimination at higher rates than trans men and trans women, with the consequence of significantly more delay

when in need of healthcare, less seeking of psychological and/or medical help, and worse evaluations of trans-specific healthcare services.

Materials and Methods

Self-identified trans and gender diverse people aged 16 years and older, and living in one of five different European countries (Georgia, Poland, Serbia, Spain, or Sweden) were invited to complete an online anonymous survey regarding healthcare experiences (6). Participation was completely voluntary and without incentives. The specifics of the methodology used has previously been explained in Burgwal, Gvianishvili (5).

The questionnaire consisted of open and closed questions, and not all questions were obligatory resulting in different response rates per question. Existing and validated measurement tools were used for selected topics of interest where possible.

Main outcome measures

Participants were asked a number of *demographic questions*, including age (measured by birth year), educational level, socio-economic status (SES), belonging to minority groups (ethnic minority, religious minority, sexual minority, or minority due to ability status), and gender identity (5).

Experiences in general healthcare services was measured with two questions. First, respondents were asked if they had ever delayed going to the doctor for general healthcare because of their gender identity. This variable was dichotomized for analysis (Yes/No).

Those who indicated that they had delayed going to the doctor for general healthcare were asked why, for which four options could be selected. Multiple options could be selected.

Second, discrimination in general healthcare services was evaluated by asking respondents if they had felt personally discriminated against by a healthcare provider in general healthcare because of their gender identity or expression in the previous 12 months (Yes/No).

Access to trans-specific healthcare services was measured by asking all respondents if they had ever sought psychological or medical help for being trans (Yes/No). Those respondents

who indicated they had *never* sought access to trans healthcare services were asked to indicate why they had never sought any psychological or medical help (16 options). They could select multiple options.

Experiences with trans-specific healthcare services was measured for those respondents who indicated they had ever sought access to trans healthcare services. All types of trans-specific healthcare were dichotomized to variables with two answer options (“Yes/in the future”, “No, not interested”).

Evaluation of trans-specific healthcare services was measured by evaluating trans-specific healthcare services in general, and by evaluating each type of trans-specific treatment on a five-point Likert scale, ranging from “Very good” to “Very bad”.

Statistical Analysis

Data analysis was performed using SPSS for Windows, v26 (7). A power analysis was conducted to determine the number of participants in this study (8, 9). Chi square tests were used for categorical variables, unless any cell in the contingency tables consisted of fewer than five respondents, in which case the Fisher exact test was used. For continuous outcomes, ANCOVA was applied (the data meet the assumptions for this test). For categorical response variables, logistic regression was applied. When possible, the analyses were controlled for influence of background variables (age, educational level, SES, belonging to an ethnic, religious, sexual minority or disability minority group, and SAAB). These variables were included in a logistic/ANCOVA model as control variables, along with gender identity (trans binary or gender diverse) as the main independent variable of interest. Variance inflation factors (VIF) were calculated to test multicollinearity among the independent variables included in the models, and were dealt with when VIFs were too high ($VIF > 4$) (10). A *p*

value of $< .05$ was considered to be statistically significant. To achieve power of 0.80 and a small effect size (0.20) a sample size of at least 392 is required to detect a significant model.

Results

1170 trans respondents filled in the questionnaire. The data-cleaning process excluded respondents who did not give their consent, who were not living in one of the five countries under study or who had not lived there in the 24 months preceding the survey, those who took less than 10 minutes to fill in the long questionnaire, those who stopped after the question about informed consent, country of residence, or gender identity, and those who indicated to be intersex but did not identify as trans or gender diverse ($n = 22$). Only two respondents indicated to be intersex and identified as trans or gender diverse, so this variable was not used within analysis. Of the 1101 participants that consented, were from one of the five countries under study and filled in the questionnaire in more than 10 minutes, 742 completed the full questionnaire (completeness rate = 67.4%). The descriptive statistics for trans and gender diverse respondents are summarized in Table 1.

Table 1. Socio-economic background variables of trans or gender diverse respondents (N=853)

		Trans	Gender diverse	<i>p</i>
Country of residence %(<i>N</i>)	Georgia	71.4 (15)	28.6 (6)	
	Poland	85.1 (63)	14.9 (11)	
	Serbia	83.3 (30)	16.7 (6)	
	Spain	87.1 (237)	12.9 (35)	
	Sweden	61.8 (278)	38.2 (172)	.001*** <
Sex assigned at birth (SAAB %(<i>N</i>))	Female	59.2 (369)	82.6 (190)	
	Male	40.8 (254)	17.4 (40)	.001*** <
Age <i>M</i> (<i>SD</i>)		27.1 (10.3)	24.7 (8.1)	.001***
Education %(<i>N</i>)	Basic	48.0 (299)	57.0 (131)	
	Advanced	52.0 (324)	43.0 (99)	.020*
Having difficulty with making ends meet % <i>Yes</i> (<i>N</i>)		20.3 (109)	11.5 (24)	.007**
Belongs to minority group % <i>Yes</i> (<i>N</i>)	Ethnic	8.0 (41)	11.2 (23)	.174
	Religious	9.0 (47)	15.6 (32)	.01*
	Sexual	75.8 (398)	93.8 (195)	.001*** <
	Disability	24.7 (128)	34.0 (70)	.011*

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

Experiences in general healthcare services

When asked about delaying seeing a doctor for general healthcare, more than half (56.2%, $n = 441$) said they had delayed going to the doctor at least once because of their gender identity. No significant difference could be found between trans and gender diverse respondents in delayed general healthcare ($X^2(1) = 0.04$, $p = .844$). After adjusting for the different control variables (age, educational level, SES, belonging to one of the minority groups, and SAAB) a small significant association between trans and gender diverse identity groups and delay of healthcare could be detected (see Table 2). Respondents belonging to the gender binary group, those belonging to a sexual and disability minority group, respondents with a female SAAB, and respondents who have more difficulty with making ends meet, report significantly more delay before seeking help when all the variables are taken together into one model.

Table 2. Logistic analysis results - delay of seeking healthcare

Independent variable	Model estimate (X²)
Intercept	0.80 (0.17)
TRANS (binary)	1.46 (4.16)*
EDUCATION (basic)	0.80 (0.18)
ETHNIC (no)	1.18 (0.34)
RELIGIOUS (no)	1.01 (0.002)
SEXUAL (no)	0.53 (9.73)**
DISABILITY (no)	0.58 (8.58)**
SAAB (female)	2.00 (15.28)***
AGE	0.99 (1.04)
SES	1.16 (6.49)*

Note. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. The model estimate (B) has been exponentiated to facilitate interpretation (odds ratio).

A model comparing trans men with trans women also showed that trans men significantly more often delay seeing a doctor for general healthcare ($p < .001$). The reasons for delaying going to general healthcare services can be found in Table 3.

Table 3. Motivations for delaying general healthcare of trans or gender diverse respondents (N=441) (multiple answers possible) %(N)

	Trans	Gender diverse	p
Because I think I will be treated badly	56.5 (182)	75.6 (90)	.006**
Because I'm afraid	47.8 (154)	49.6 (59)	.780
Because I do not want to disclose my trans identity / background	44.7 (144)	36.1 (43)	.166
Other (please specify)	21.4 (68)	26.9 (32)	.255

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

‘Other’ reasons often mentioned were previous negative experiences, the feeling of shame, and the fear of being misgendered when seeking help.

Furthermore, almost one in four participants (24.9%, $n = 191$) felt personally discriminated against by a healthcare provider in general healthcare services within the previous year.

Discrimination was not significantly more often reported by one of the gender identity groups (24.5%, $n = 136$ for trans respondents and 25.9%, $n = 55$ for gender diverse respondents,

$X^2(1) = 0.17, p = .680$). However, within the trans group, significantly more trans men

(28.0%, $n = 91$) reported experiences of discrimination within healthcare in the last 12

months, compared to trans women (19.6%, $n = 45, X^2(1) = 5.18, p = .023$). Different control variables proved to be important in the prediction of discrimination experiences (see Table 4).

On average, the odds of having experienced discrimination in the past 12 months is higher among respondents with a high educational level, respondents belonging to a disability minority group, younger respondents, and among respondents with more difficulty with making ends meet.

Table 4. Logistic analysis results - discrimination

Independent variable	Model estimate (X²)
Intercept	0.47 (1.44)
TRANS (binary)	0.98 (0.01)
EDUCATION (basic)	0.65 (4.66)*
ETHNIC (no)	1.16 (0.19)
RELIGIOUS (no)	1.07 (0.06)
SEXUAL (no)	1.36 (1.59)
DISABILITY (no)	0.43 (17.22)***
SAAB (female)	1.48 (3.33)
AGE	0.96 (9.01)**
SES	1.30 (14.32)***

*Note. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. The model estimate (B) has been exponentiated to facilitate interpretation (odds ratio)*

Access to trans-specific healthcare services

The majority of survey participants (73.6%, $n = 628$), had ever sought psychological or medical help for being trans, with a significantly lower proportion of gender diverse respondents (40.0%, $n = 92$) than trans respondents (86.0%, $n = 536$, $X^2(1) = 183.32$, $p < .001$) having done so. Additionally, the analysis showed that educational level was also associated with seeking trans-specific healthcare services (see Table 5). Respondents with a basic educational level are less likely to have sought help than respondents with an advanced educational level.

Table 5. Logistic analysis results - seeking trans-specific help

Independent variable	Model estimate (X²)
Intercept	0.61 (0.58)
TRANS (binary)	9.77 (116.05)***
EDUCATION (basic)	0.58 (6.60)*
ETHNIC (no)	1.82 (3.20)
RELIGIOUS (no)	0.90 (0.11)
SEXUAL (no)	1.15 (0.22)
DISABILITY (no)	0.97 (0.02)
SAAB (female)	0.94 (0.07)
AGE	0.99 (0.35)
SES	1.07 (0.75)

Note. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. The model estimate (B) has been exponentiated to facilitate interpretation (odds ratio).

Among the respondents who did not seek any help (26.4%, $n = 225$), different reasons were provided (see Table 6).

Table 6. Motivations for not accessing trans-specific healthcare services, of trans or gender diverse respondents (N = 222) (multiple answers possible) %(N)

	Trans	Gender diverse	p
It is not available in the country where I live	3.5 (3)	2.9 (4)	.089
It is not covered by my country's public health insurance	7.0 (6)	1.5 (2)	1.000
I do not want help / need help	36.0 (31)	37.5 (51)	< .001***
I cannot afford it due to financial reasons	23.3 (20)	17.6 (24)	< .001***
I am afraid to	31.4 (27)	17.6 (24)	< .001***
I do not have confidence in the services provided	29.1 (25)	50.7 (69)	< .001***
I do not know where to go	19.8 (17)	43.4 (59)	< .001***
I do not know what to expect / I'm not familiar with the procedures	17.4 (15)	41.2 (56)	< .001***
Because of my partner(s) / because of my child(ren)	2.3 (2)	2.9 (4)	.048*
Because of my wish to have children	4.7 (4)	5.1 (7)	.011*
It takes too much time (including waiting lists)	18.6 (16)	25.7 (35)	< .001***
I am afraid of prejudice from healthcare providers	32.6 (28)	52.9 (72)	< .001***
The bureaucracy is too complicated	14.0 (12)	16.9 (23)	< .001***
I have had previous bad experiences with healthcare providers	18.6 (16)	27.2 (37)	< .001***
I might want to, but I have not yet	26.7 (23)	40.4 (55)	< .001***
Other (please specify)	12.8 (11)	15.4 (21)	< .001***

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

Almost a quarter of all respondents chose to write something in the answer option ‘other, please specify’. The most frequently mentioned reasons were in the form of ‘*there is no non-binary treatment where I live*’, ‘*my parents do not consent to treatment and I am not fully independent yet*’, and ‘*at the moment it would be a waste of time, since I do not need any treatment for my gender identity*’.

Experiences with trans-specific healthcare services

When assessing different types of trans-specific healthcare, significantly more trans people were interested in, or had already undergone, the specific types of trans-specific treatments, compared to gender diverse respondents (see Table 7).

Table 7. Different types of trans-specific healthcare, of trans or gender diverse respondents (N = 853) % Undergone or desired (N)

	Trans	Gender diverse	p
Assessment and/or monitoring by a mental health professional (psychologist / psychiatrist)	81.9 (510)	36.5 (84)	< .001***
Hormone blockers / puberty blockers	56.7 (353)	19.1 (44)	< .001***
Gender affirming hormonal therapy (such as estrogen or testosterone)	83.1 (518)	34.3 (79)	< .001***
Chest surgery: reducing or removing breasts (mastectomy) / making breasts larger (breast augmentation)	72.2 (450)	32.3 (74)	< .001***
Removal of uterus / ovaries or of testes (hysterectomy / ovariectomy or orchidectomy)	62.8 (391)	17.8 (41)	< .001***
Genital surgery (vaginoplasty, metoidioplasty, phalloplasty)	56.3 (351)	7.0 (16)	< .001***
Facial feminizing surgeries	22.0 (137)	3.9 (9)	< .001***
Voice surgery	18.8 (117)	4.3 (10)	< .001***
Removal of hair using laser or electrolysis	35.2 (219)	8.7 (20)	< .001***
Reshaping or removal of Adam's apple (tracheal shave or removal)	20.9 (130)	3.9 (9)	< .001***
Other gender-related surgery	18.3 (114)	6.5 (15)	< .001***

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

Significantly more trans respondents had been consulting/would like to consult a mental health professional and/or are/were/would like being under GAHT than gender diverse respondents ($X^2(1) = 163.32, p < .001$ and $X^2(1) = 190.44, p < .001$ respectively). Also, when all control variables were included, (see table 8). Additionally, educational level, belonging to an ethnic minority, and age were associated with consulting a mental health professional and/or GAHT (see Table 8). Respondents with a basic level of education and belonging to an ethnic minority are less likely to access a mental health professional or GAHT. Also, the odds of consulting a mental health professional or undergoing GAHT increases with age.

Table 8. Logistic analysis results - consulting a mental health professional or undergoing GAHT

Independent variable	Model estimate (X ²) - mental health professional	Model estimate (X ²) - GAHT
Intercept	0.24 (5.81)*	0.05 (23.82)***
TRANS (binary)	10.30 (123.79)***	9.08 (76.25)***
EDUCATION (basic)	0.64 (5.60)*	0.44 (20.37)***
ETHNIC (no)	2.71 (10.03)**	2.14 (5.23)*
RELIGIOUS (no)	0.71 (1.22)	0.80 (0.52)
SEXUAL (no)	1.31 (1.22)	1.43 (2.77)
DISABILITY (no)	0.85 (0.64)	1.05 (0.05)
SAAB (female)	0.98 (0.01)	0.97 (0.03)
AGE	1.00 (0.01)	1.03 (8.98)**
SES	1.00 (0.002)	1.00 (<0.001)

Note. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. The model estimate (B) has been exponentiated to facilitate interpretation (odds ratio).

Evaluation of trans-specific healthcare services

Respondents were asked to evaluate trans-specific healthcare in general, as well for specific aspects (see Table 9). On average, healthcare evaluations ranged from fair to bad ($M = 3.25$, $SD = 1.05$). Gender diverse respondents gave a significantly worse evaluation ($M = 4.14$ $SD = .99$) than trans respondents ($M = 3.34$ $SD = 1.30$, $F(1,687) = 19.14$, $p < .001$). For mental healthcare, evaluations between gender diverse and trans respondents did also differ ($p < .001$) when only assessing those who already accessed mental healthcare. For the other types of trans-specific healthcare, sample sizes were too small to assess a difference between both gender identity groups when solely looking at those respondents who underwent the specific type of treatment.

Table 9. Evaluations of trans-specific healthcare in general, as well as specific treatment types *M(SD)*

	Trans	Gender diverse	<i>p</i>
In general	3.34 (1.30)	4.14 (.99)	< .001***
Mental health	3.54 (1.27)	4.00 (.98)	< .001***
Hormone blockers / puberty blockers	3.34 (1.30)	4.32 (.78)	.003**
Cross-sex hormone treatment (such as estrogen or testosterone)	2.88 (1.27)	3.95 (.95)	< .001***
Chest surgery: reducing or removing breasts (mastectomy) / making breasts larger (breast augmentation)	3.18 (1.45)	4.05 (1.00)	< .001***
Removal of uterus/ovaries or testes (hysterectomy / ovariectomy or orchidectomy)	3.10 (1.43)	4.09 (0.97)	< .001***
Genital surgery (vaginoplasty, metoidioplasty, phalloplasty)	3.40 (1.43)	4.18 (.91)	.121
Facial feminising surgeries	3.58 (1.36)	4.41 (.73)	.015*
Voice surgery	3.52 (1.34)	4.41 (.80)	.026*
Removal of hair using laser or electrolysis	2.86 (1.4)	3.64 (1.18)	< .001***
Reshaping or removal of adam's apple (tracheal shave or removal)	3.26 (1.35)	4.14 (0.83)	< .001***

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

When the different control variables are included in a model along with gender identity groups, an additive effect of a poor SES, and of belonging to a sexual minority group was found (see Table 10).

Table 10. Analysis of covariance results - evaluation of trans-specific healthcare (in general)

Independent variable	Model estimate (F)
Intercept	3.57 (261.79)***
TRANS (binary)	-0.39 (14.09)***
EDUCATION (basic)	0.003 (0.001)
ETHNIC (no)	0.04 (0.06)
RELIGIOUS (no)	-0.06 (0.14)
SEXUAL (no)	-0.24 (4.59)*
DISABILITY (no)	-0.03 (0.07)
SAAB (female)	-0.07 (0.56)
AGE	-0.01 (1.91)
SES	0.09 (8.91)**

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

Discussion

Gender diverse individuals represent a growing and increasingly visible population with unique healthcare experiences and needs. This research is one of the first steps in comparing access to healthcare services between gender diverse and trans people.

For experiences in general healthcare services, we found a small significant difference between the two gender identity groups when taking the control variables into account, which is similar to the findings of the U.S. survey of Grant, Mottet (11). The reasons behind delaying care were the same within both studies, namely the fear of insensitive or incompetent treatment, however significantly more were reported by gender diverse respondents within this study. We also found that gender diverse individuals report similar rates of discrimination experiences compared to trans respondents. This is in contrast with other research, where trans respondents report more experiences of discrimination in comparison to gender diverse respondents (12-14).

Regarding access to trans-specific healthcare services, we found significantly less gender diverse respondents seeking psychological or medical help in trans-specific healthcare services. A lower amount of gender diverse people had experience with GAHT. The reasons behind these findings are likely to be multifaceted. Regarding the need for hormone therapy, more gender diverse people report that they do not need trans-specific care. Also, low levels of knowledge among healthcare providers about hormone therapy for gender diverse people, or information about the range of options available for gender diverse people (e.g. the option for a lower dose and/or temporary hormone use), may indicate an obstacle to the prescription of hormones. Some gender diverse individuals do report they want to have, or are taking, GAHT, given that already one in ten respondents within this study have had experience with this type of treatment. Gender diverse respondents did indicate different barriers when seeking access to healthcare (more fear of prejudice from healthcare providers, not having

confidence in the services provided, not knowing where to go). However, as table 6 indicates, significantly more gender diverse respondents indicated that they do not know where to go ($p < .001$) and that they do not know what to expect/are not familiar with the procedures ($p < .001$). This indicates that gender diverse people are also less informed about the possibilities of trans-specific care. Interventions should therefore not only focus on knowledge of healthcare providers, but also reach out to the gender diverse populations.

The results of our findings regarding evaluations of the services provided, partially confirm findings from Goldberg, Kuvalanka (15), who found that gender diverse respondents rate healthcare services (in this case trans-specific healthcare services) significantly less positively than trans respondents. However, the lower evaluations of healthcare services by gender diverse respondents should not be attributed to discrimination experiences per se, since both groups reported a similar amount of discrimination experiences within healthcare services. Other negative experiences reported in the literature, such as harassment, sexual assault, refusal of treatment, avoidance, etc. (2, 16) and the poorer mental health outcomes of gender diverse people (2, 5) could be possible explanations for why gender diverse people gave significantly poorer evaluations of healthcare services. These results could also be explained by the fact that gender diverse people more often feel misunderstood due to the prevalent gender binary scripts within our society, which could influence their experiences and thus expectations of prejudice, including in healthcare settings, resulting in lower evaluations.

A strength of the current study is that a large sample was used ($N = 853$). The involvement of trans organizations in the five countries yielded a large and diverse sample of trans men and trans women, as well as gender diverse respondents, as well as large samples ($n > 30$) of respondents belonging to an ethnic, religious, sexual and/or disability minority group. The influence of other background characteristics such as age, educational level, belonging to different minority groups, SES, SAAB, could also be differentiated. In accordance with the

minority stress model (17, 18), SAAB had no influence on each of the different outcome variables (except delay of seeking healthcare), but the social impact of a person because of their belonging to a minority group did (especially belonging to a gender minority group, but also belonging to an ethnic, sexual and/or disability minority group). Future research may extend the generalizability of the findings reported here by including other measures of value that were not included in this analysis, and by including the additive effect of belonging to multiple minority groups at once.

The study also has some limitations that should be kept in mind when interpreting the results. First, this was a cross-sectional study and therefore cannot be interpreted to provide evidence of causality. Second, the sample was constructed from an online convenience sample and therefore cannot be taken as representative of the trans and gender diverse population. In particular, the sample was primarily comprised of young, AFAB, and highly educated respondents, which is as expected with online surveys (19). Also, individuals who live in rural areas or who are not in contact with trans-identified places or organizations may not have been reached. Further, the data gathering was online, so respondents were expected to have digital literacy. Another limitation within the entire study concerns the total respondents per country, with low response rates in Georgia ($n = 21$) and Serbia ($n = 36$), making comparisons across countries impossible. Lastly, the construction of gender identity groups was based on a limited list of gender identity labels and sex assigned at birth. Respondents were categorized by the researchers into a dichotomous variable (trans or gender diverse) which can limit the individual's lived experience of their gender.

The high proportion of trans people who delay seeking general healthcare, and the high proportion who experienced discrimination, are indicative of the need for more education initiatives among healthcare providers. Trans people and gender diverse people often fear prejudice from healthcare providers, and especially gender diverse people have no confidence

in the services provided, and/or do not know where to go. Trans health education should go hand in hand with an open communication and setting up trans-friendly healthcare environments. This in turn could increase access to care, and decrease the poor evaluation of the services provided. Future research should therefore focus on knowledge of healthcare providers regarding the gender identity and gender expression of their patients, as well as their own attitudes and any prejudices towards trans patients.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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Institutional Review Board Statement

The study was conducted according to the guidelines of the Declaration of Helsinki. No specific ethical approval was applied for since general ethical research principles in data gathering and data storage were followed, according to the Belgian law regarding experiments on humans (Wet inzake experimenten op de menselijke persoon). Potential

participants were informed about the topics of the survey, the aim of the survey and the parties involved in the data gathering and analytical process, and had to give their explicit consent before they were able to proceed with the online survey.

Data Availability

Restrictions apply to the availability of the data. Data was obtained from Transgender Europe and are available from the authors with the permission of Transgender Europe.

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