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Disparities in access to family physicians among transgender people in Ontario, Canada

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ABSTRACT

Background: Informed by the Gelberg-Andersen behavioral model for vulnerable populations, this study examined the prevalence of and factors associated with not having a family physician among transgender (trans) people in Ontario, Canada.

Methods: Data were drawn from a respondent-driven sampling (RDS) survey of trans Ontarians age 16 and above ($n = 433$) conducted between 2009 and 2010. All analyses were weighted using RDS II methods. Prevalence ratios were estimated using average marginal predictions from logistic regression models.

Results: An estimated 17.2% (95% CI, 11.0 to 22.9) of trans Ontarians (median age $= 28.7$, 77.3% White) did not have a regular family physician. In multivariable analyses accounting for other predisposing and need-related factors, transfeminine persons (trans women and non-binary persons assigned a male sex at birth) who were Indigenous and/or persons of color were less likely than other transfeminine persons to have a family doctor. In addition, trans persons who were homeless or had unstable housing were less likely to have a family doctor than those who were adequately housed.

Conclusions: These results provide the first quantitative evidence of health disparities by race and gender within a Canadian transgender population and suggest a social gradient in access to care within Ontario's "universal health insurance" system.

Introduction

Transgender (trans) persons are those whose gender identity or expression varies from their sex assigned at birth. Estimates from the United States indicate that 0.6% of the adult population is trans (Flores, Herman, Gates, & Brown, 2016). While not all trans people need to medically transition (Scheim & Bauer, 2015), those who do require care related to hormonal and/or surgical treatments (Coleman et al., 2012). In addition, trans people are at elevated risk for health problems, including mental health concerns and sexually transmitted infections (Reisner et al., 2016). Despite potentially greater need for health care, trans people are a medically underserved population (Institute of Medicine, 2011). Due to stigma and discrimination experienced in health care settings, trans persons may avoid both preventive and emergency care (Bauer, Scheim, Deutsch, & Massarella, 2014; Grant et al., 2011; Kattari, Walls, Whitfield, & Langenderfer-Magruder, 2015).

In Canada, co-management of hormone therapy and referrals to and coordination with specialists and surgeons often fall within the scope of services provided by family physicians. Moreover, family physicians play a vital role in the prevention and treatment of medical and mental health conditions for trans people (Feldman & Goldberg, 2006). While access to primary care is available free of charge to Canadian residents, the system does not have universal coverage; shortages of family physicians, particularly in rural areas (Pong & Pitblado, 2005), and sociocultural access barriers (e.g., language, cultural insensitivity) remain challenges (Asanin & Wilson, 2008). In 2011, 9.1% of Ontario residents did not have a regular doctor (Statistics Canada, 2012). The extent of access to family physicians among trans people in Canada has not previously been assessed. However, transgender medical education has been identified as insufficient across Canada (Chan, Skocylas, & Safer, 2016), and

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physicians report that this challenges their ability to provide care to trans patients (Snelgrove, Jasudavisius, Rowe, Head, & Bauer, 2012).

Access to or avoidance of health care and discrimination within health care settings have been found to vary by gender, race/ethnicity, and age within trans samples in the United States (Cruz 2014; Shires & Jaffee, 2015). The extent to which such disparities exist within trans populations under single-payer health insurance systems such as Canada's is unknown.

The present study sought to understand the prevalence of and factors associated with not having a family doctor among trans people under a universal health insurance system, wherein inability to pay should not impact access to care. Data were drawn from a respondent-driven sampling survey of transgender people in Ontario, Canada. We hypothesized that general sociodemographic and need-related factors, as well as trans-specific characteristics and experiences, would be associated with having a family doctor.

Methods

Theoretical framework

Andersen (1968) originally proposed a model in which health services use was influenced by predisposition to access care (i.e., sociodemographic characteristics),

enabling and impeding factors, and need for care. Gelberg and colleagues (Gelberg, Andersen, & Leake, 2000) expanded the model to include two domains: general (factors presumably shared with the broader population) and vulnerable (factors unique to a specific marginalized population). This Gelberg-Andersen behavioural model for vulnerable populations informed development of an exploratory model of barriers to accessing family physicians for trans Ontarians, incorporating both general and trans-specific (vulnerable) factors (Figure 1).

Survey methods and study sample

As part of the Trans PULSE Project (an Ontario-wide, cross-sectional study of trans health), 433 self-identified trans people aged 16 and older completed a multi-mode survey (online or paper copy) between 2009 and 2010. Participants were excluded from this analysis if they were missing outcome data ($n = 20$), or more than 20% of independent variables ($n = 13$), resulting in an analytic sample size of 400. Ethics approval was obtained from research ethics boards at the University of Western Ontario and Wilfrid Laurier University.

Respondent-driven sampling (RDS), a tracked chain-referral sampling approach, was used for recruitment and analysis. RDS was chosen because it
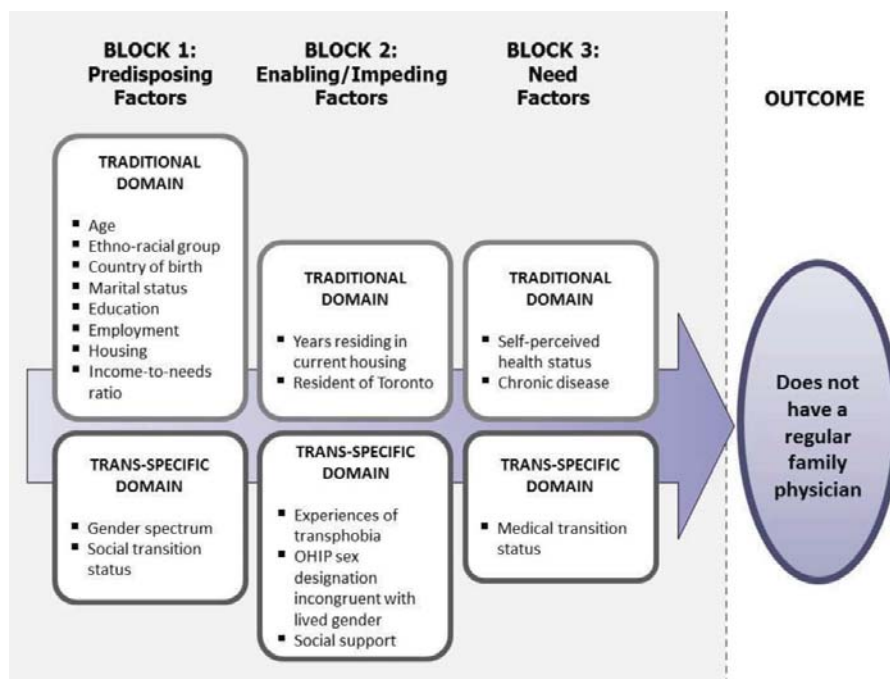

Figure 1. Theoretical model, based on the Gelberg-Andersen model, of factors affecting lack of access to a regular family physician among trans people in Ontario, Canada.

is designed to recruit and estimate the characteristics of well networked, hard-to-reach populations from which a random sample cannot be drawn (Heckathorn, 1997, 2002). Recruitment began with 16 "seed" participants, who were selected for maximum sociodemographic and geographic diversity and for having community connections, using an open application process. Each participant was able to recruit up to three peers using tracked coupon codes. Twenty-two additional seeds were added after four to five waves of recruitment; these seeds were selected from project-affiliated community members and from among those who had contacted the project wishing to participate but who had not yet been recruited. Recruitment continued until the tenth wave to ensure the attainment of equilibrium (i.e., sample composition independent of the characteristics of starting participants). Participants received a $20 gift card as honorarium or could choose to donate the amount to a trans-related charity. Secondary incentives ($5 gift cards) for recruitment of peers were added in the final months of data collection, with no perceptible impact on recruitment. Network size (for RDS weights) was ascertained by asking participants, "How many other people do you personally know who could answer yes to all three eligibility questions?" following items that asked them to indicate whether they were 16 years of age or older; considered themselves "trans," of "trans experience," or "trans-identified"; and currently lived, worked, or received health care in Ontario.

Measures

All measures were based on self-report. The survey instrument is available online at http://transpulse project.ca/resources/trans-pulse-survey/. Participants reported whether they had a regular family physician.

Predisposing factors

Traditional predisposing (i.e., sociodemographic) factors for health care access were age, ethnoracial background, country of birth (Canada versus other), marital status, educational attainment, employment status, housing situation, and income-to-needs ratio. Ethnicity and race were measured using a check-all-that-apply list and coded as White versus Indigenous and/or person of color. Participants were coded as under-housed if they were currently homeless, living in temporary or unstable housing (e.g., shelter,

boarding house), or had difficulty meeting monthly housing costs while living below Statistics Canada's low-income cut-off (Statistics Canada, 2009). Income-to-needs ratio was computed by dividing the midpoint of the categories for annual family income by family size. Trans-specific predisposing factors included gender spectrum and social transition status. Participants indicated sex assigned at birth, and selected one or more gender identities from a list of 15 options (plus an open-text field). For analytic purposes, they were classified as transmasculine (male or non-binary identity, assigned female at birth) versus transfeminine (female or non-binary identity, assigned male at birth) spectrum. For social transition status, participants indicated whether they were living in their felt gender part time, full time, or not at all.

Enabling/impeding factors

Traditional domain enabling/impeding factors were residential stability (years residing in current housing) and whether residence was in Toronto, Ontario's capital and largest urban center, where access to trans-friendly services may be greater. Trans-specific enabling/impeding factors included experiences of trans-related stigma and discrimination (transphobia), having a sex designation on the health card inconsistent with one's lived gender, and level of social support. Participants who identified as primarily male/masculine or female/feminine and lived full-time in that felt gender were classified as having an incongruent health card if the sex designation on their Ontario Health Insurance Plan (OHIP) card was inconsistent with that gender identity; those who had non-binary gender identities and/or had not socially transitioned were considered to have a health card that could potentially match their gender presentation. Experiences of felt stigma and discrimination related to being trans ("transphobia") were assessed by an 11-item scale (Cronbach's $a = 0.81$; Marcellin, Bauer, & Scheim, 2013) including items pertaining to felt stigma (e.g., hearing that trans people are not normal) and discrimination (e.g., being turned down for a job). Social support was measured with the Medical Outcomes Study scale, which assesses one's level of access to emotional/informational, tangible, and affectionate social support and to positive social interaction (Sherbourne & Stewart, 1991); Cronbach's a in our data was 0.97.

Need factors

Traditional factors that indicate need for health services included self-perceived health status and the presence of a chronic disease or health condition. Health status was assessed with a 5-point Likert scale and was dichotomized into excellent/very good/good versus fair/poor. One trans-specific item related to need for a regular physician was included: medical transition status. Medical transition status was coded according to four categories based on whether participants indicated that they had completed a medical transition (which could involve different combinations of hormones and/or surgeries), were in the process of transitioning, were planning to medically transition but had not begun, or had not medically transitioned. The latter category included those who were not planning, were unsure, or who indicated that the concept of transition did not apply to them.

Data analysis

Weighted frequencies and associated 95% confidence intervals were estimated using SAS version 9.3 (SAS Institute Inc., 2012). RDS II methods (Volz & Heckathorn, 2008) were used to weight estimates by recruitment probability, with weights calculated as the inverse of participant network size (rescaled to sum to the total sample size). Variances were adjusted for clustering by shared recruiter. Thus, weighted statistics can be interpreted as estimates for Ontario's networked trans population—that is, those who know at least one other trans person age 16 or older in Ontario. For multivariable analyses only, simple imputation of the mean or mode was used for variables with less than 10% missingness to avoid participant loss in a complete case analysis; ultimately, all variables selected for simple imputation had < 4.0% missing values. Income-to-needs ratio (12.0% missing) was multiply imputed using weighted sequential hot-deck imputation in SUDAAN version 11 (RTI International, 2013), with five imputations.

　　Blockwise logistic regression models were built to identify factors associated with not having a family doctor. First, hierarchical backward elimination was performed in SAS 9.3 including all variables of interest and plausible interactions. For each block, variables associated with the outcome at $p < 0.20$ were retained and carried forward into the regression for the next block of variables. Age

was forced to remain in models irrespective of p value. Predisposing, enabling/impeding, and need factors were entered in turn in a series of three blocks (see Figure 1). Logistic regression analyses were conducted in SAS-callable SUDAAN. Models were weighted using RDS II weights and adjusted for clustering based on shared recruiter. Prevalence ratios (PR) and adjusted prevalence ratios (APR) and their confidence intervals were estimated using the ADJRR statement in the RLOGIST procedure to produce marginal predictions (Bieler, Brown, Williams, & Brogan, 2010). Scale scores were treated as continuous, but since PRs may vary across the range of scale values, the calculation of PRs requires reference values. Thus, PRs are presented as comparisons of 75th percentiles to 25th percentiles.

Results

Outcome frequency

A diagram of the recruitment network structure for the 433 trans Ontarians who completed the survey is presented in Figure 2. An estimated 17.2% (95% CI = 11.0, 22.9) of trans Ontarians did not have a family physician.

Predictors of not having a family physician

Frequencies for hypothesized predisposing, enabling/impeding, and need factors are presented in Table 1, along with crude PRs describing their associations with not having a regular family physician. Individuals who were single were less likely to have a family doctor as compared to those who had been previously married (PR for previously married versus single = 0.01, 95% CI = 0.00, 0.11), as were those who were living full time in their felt gender, as compared to not at all (PR for not living in felt gender versus living full time = 0.28, 95% CI = 0.08, 0.99). Under-housing was associated with not having a family physician (PR = 2.72, 95% CI = 1.43, 5.16).

　　Results of blockwise regression models are presented in Table 2. As enabling and impeding factors were excluded in backwards elimination, Models 1 (predisposing factors) and 2 (adding need factors) are presented. Only predisposing factors were independently associated with not having a family physician. Specifically, after adjusting for other predisposing factors and
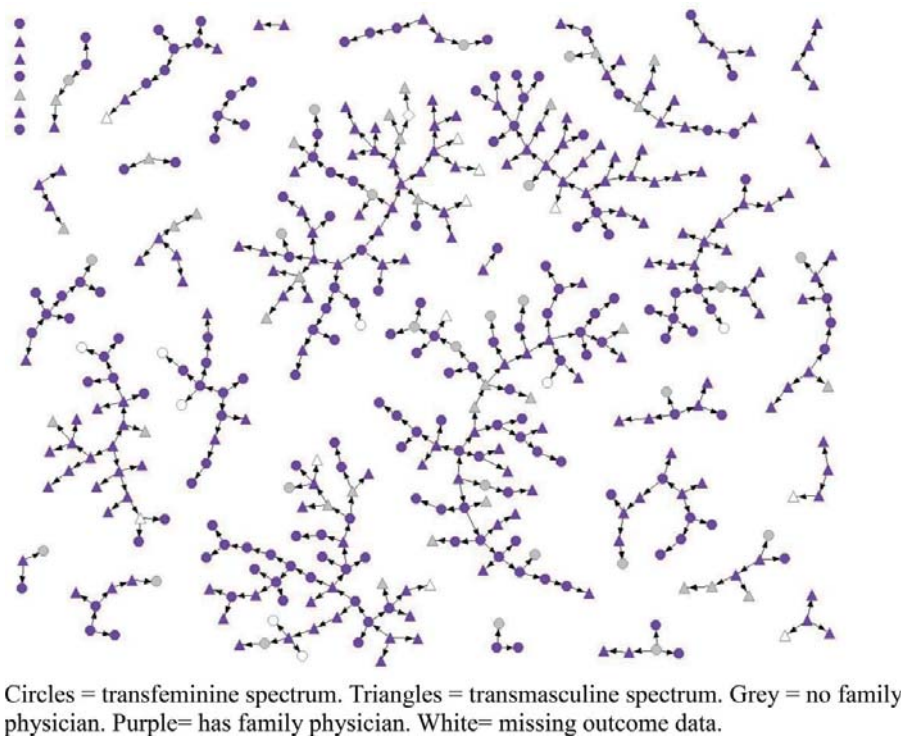
Circles = transfeminine spectrum. Triangles = transmasculine spectrum. Grey = no family physician. Purple= has family physician. White= missing outcome data.

Figure 2. Network diagram of sample of trans people in Ontario, Canada (*n* = 433).

for the presence of a chronic disease or condition, being previously married (APR = 0.03, 95% CI = 0.00, 0.25) was negatively associated with not having a family physician and being under-housed was positively associated with not having a family physician (APR = 2.14, 95% CI = 1.19, 3.84). In addition, an interaction was detected between gender spectrum and race, such that transfeminine persons who were Indigenous and/or of color were less likely to have a family doctor than their White transfeminine counterparts (APR = 2.65, 95% CI = 1.09, 6.41).

Discussion

The present study provided a first look at access to family physicians for trans people in Canada. We found that in 2009 to 2010, an estimated 17.2% of trans Ontarians reported not having a family physician, which is higher than the 9.1% estimated for Ontarians overall during that time period (Stastistics Canada, 2012). Predisposing, rather than enabling/impeding or need factors, were independently associated with having a family doctor. This is somewhat consistent with expectations, as curative care or urgent care utilization is primarily influenced by need factors, while more discretionary (e.g., preventive) care

utilization is largely influenced by predisposing and enabling/impeding factors (Aday & Awe, 1997).

Independent predictors of not having a family physician included unstable housing (homelessness or under-housing) and marital history. We also found that among transfeminine persons only, being Indigenous and/or of color predicted not having a family physician, even after controlling for other sociodemographic factors.

This result underscores the need to take an intersectional approach to trans health disparities research, one that simultaneously considers multiple axes of social position. That this association was found only among transfeminine persons could reflect compounded marginalization on the bases of gender, transgender status, and race/ethnicity. Research in the United States has documented poorer health care access and outcomes among trans people of color compared to their White counterparts (Grant et al., 2011). Within the trans population, persons of color and Indigenous persons report higher levels of racism and discrimination, including in health care settings (Bradford, Reisner, Honnold, & Xavier, 2013; Grant et al., 2011; Kattari et al., 2015; Marcellin et al., 2013), and socioeconomic marginalization (e.g., low incomes; Grant et al., 2011). In addition, Canadian (cisgender)

Table 1. Weighted prevalence estimates and crude prevalence ratios for predictors of not having a family physician among transgender Ontarians (n = 400).

	Frequency within trans population		Association with not having a family physician	
	%	95% CI	Crude PR*	95% CI
Predisposing Factors–Traditional Domain				
Age				
Median, IQR	28.7	22.1–39.0	—	—
30 years old versus 20	—	—	0.76	(0.55, 1.05)
40 years old versus 20	—	—	0.57	(0.29, 1.13)
50 years old versus 20	—	—	0.42	(0.14, 1.23)
Born in Canada				
Yes	80.6	(74.5, 86.7)	1.00	
No	19.4	(13.3, 25.5)	1.37	(0.61, 3.07)
Race				
Indigenous and/or person of color	22.7	(16.6, 28.8)	1.64	(0.79, 3.39)
White	77.3	(71.2, 83.4)	1.00	
Marital status				
Single (never married)	62.2	(54.5, 69.9)	1.00	
Married/common-law	20.5	(14.7, 26.3)	0.81	(0.35, 1.86)
Previously married	17.3	(11.1, 23.4)	**0.01**	**(0.00, 0.11)**
Education				
Less than high school	11.6	(7.0, 16.2)	0.61	(0.23, 1.66)
High school diploma	15.9	(10.3, 21.5)	0.99	(0.32, 3.02)
Some college or university	27.1	(20.1, 34.1)	1.20	(0.57, 2.52)
Postsecondary diploma or degree	45.4	(37.8, 53.1)	1.00	
Employment				
Full time	34.4	(27.7, 41.2)	1.00	
Part time	15.7	(10.2, 21.1)	2.67	(0.87, 8.26)
Student	28.0	(21.0, 35.0)	2.08	(0.74, 5.84)
Other	21.9	(15.2, 28.6)	1.59	(0.55, 4.55)
Income-to-needs ratio ($/person)				
< 15,000 CDN	46.4	(38.3, 54.5)	1.00	
15,000 to < 30,000 CDN	26.6	(19.4, 33.8)	0.34	(0.10, 1.18)
30,000 to < 45,000 CDN	7.0	(3.1, 10.9)	0.27	(0.06, 1.22)
More than 45,000 CDN	20.0	(13.7, 26.2)	0.38	(0.10, 1.49)
Homeless or under-housed				
Yes	17.3	(11.4, 23.2)	**2.72**	**(1.43, 5.16)**
No	82.7	(76.8, 88.6)	1.00	
Predisposing Factors–Trans-specific Domain				
Gender spectrum				
Transmasculine	56.1	(48.2, 63.9)	1.00	
Transfeminine	43.9	(36.1, 51.8)	0.86	(0.43, 1.72)
Living in felt gender				
Full time	52.3	(43.9, 60.7)	1.00	
Part time	27.1	(20.0, 34.2)	1.25	(0.64, 2.47)
Not at all	20.6	(13.0, 28.2)	**0.28**	**(0.08, 0.99)**
Enabling/impeding Factors–Traditional Domain				
Years residing in current dwelling				
< 1	35.4	(28.3, 42.5)	1.78	(0.81, 3.91)
1–5	34.3	(27.4, 41.2)	1.00	
> 5	30.3	(23.3, 37.2)	0.97	(0.33, 2.86)
Lives in Toronto				
Yes	39.0	(31.1, 46.8)	1.20	(0.59, 2.45)
No	61.0	(53.2, 68.9)	1.00	
Enabling/impeding Factors–Trans-specific Domain				
Transphobia				
Median, IQR	12.8	9.0–18.2	—	—
75th percentile versus 25th percentile	—	—	1.26	(0.74, 2.16)
Social support				
Median, IQR	3.6	2.7–4.3	—	—
75th percentile versus 25th percentile	—	—	0.77	(0.46, 1.30)
Incongruent gender on health card				
Yes	66.8	(59.7, 74.0)	1.00	
No	33.2	(26.0, 40.3)	1.39	(0.70, 2.77)
Need Factors				
Self-rated poor/fair health				
Yes	23.6	(17.3, 29.9)	1.08	(0.45, 2.60)
No	76.4	(70.1, 82.7)	1.00	
Chronic condition				
Yes	78.3	(71.5, 85.1)	1.00	
No	21.7	(14.9, 28.5)	1.80	(0.89, 3.65)

Table 1. (Continued)

	Frequency within trans population		Association with not having a family physician	
	%	95% CI	Crude PR[*]	95% CI
Medical transition status				
Completed transition[†]	26.8	(20.3, 33.4)	1.00	
Transition in process	24.7	(18.5, 30.9)	1.02	(0.40, 2.57)
Planning but not begun	28.3	(21.0, 35.6)	1.02	(0.40, 2.58)
Not medically transitioning[‡]	20.2	(13.1, 27.2)	0.88	(0.31, 2.47)

[*]PR = prevalence ratio; CI = confidence interval; values in boldface represent significant factors at $p < 0.05$.
[†]Completed transition was based on participant self-report and may involve any combination of hormones or surgery/surgeries.
[‡]Including not planning, not applicable, or unsure.

women are at a higher risk of having unmet health care need relative to men (Socías, Koehoorn, & Shoveller, 2016).

However, with the notable exception of HIV infection (Herbst et al., 2008), the patterning of health disparities by gender and race *within* trans populations has received little empirical attention. At the same time, studies within Canada have found fewer and less pronounced disparities between non-Indigenous racialized and White populations than in the United States (Blais & Maïga, 1999; Pylypchuk & Sarpong, 2013; Quan et al., 2006; Siddiqi & Nguyen, 2009), while Indigenous people in Canada consistently have less access to family doctors than the non-Indigenous population (Siddiqi, Wang, Quinn, Nguyen, & Christy, 2016; Tjepkema, 2002). Similarly, these comparisons of health care access between Canadian ethno-racial groups, without attention to possible heterogeneity by gender and other relevant dimensions of social position, may obscure disparities faced by multiply marginalized groups such as transfeminine persons who are Indigenous and/or of color.

Our finding that having a family doctor was less common among trans individuals who were single or under-housed paralleled findings in the literature. Unmarried individuals in Canada are less likely to have a regular doctor (Talbot, Fuller-Thomson, Tudiver, Habib, & McIsaac, 2001) or to have visited a primary care provider in the last year (Dunlop, Coyte, & McIsaac, 2000). Unexpectedly, single individuals were less likely to have a family doctor compared to persons who had been previously married but not to the currently married. It is not apparent why this may be the case. Previous research into health care access and utilization among homeless and under-housed individuals has found numerous barriers to primary care in this population. One major hurdle is lack of documentation of health insurance coverage; a study conducted among homeless adults in Toronto found that 34% of respondents did not possess an Ontario Health Insurance Plan card, of whom 60% reported that this was due to their card being lost or stolen (Khandor et al., 2011). Other serious barriers are perceived stigma and discrimination from providers and lack of knowledge regarding how and where to obtain care (Argintaru et al., 2013; Khandor et al., 2011). We also note that the Trans PULSE survey explicitly inquired about having a "regular" family doctor. While homeless or under-housed individuals may be able to access low-barrier health clinics that do not require documentation of insurance status, such services may be challenged to provide continuity of care to this often-transient patient population.

Strengths and limitations

This study had a number of strengths, including the use of respondent-driven sampling with a diverse province-wide population, a community-based participatory research approach, and multimode data collection. The study also had some important limitations. Estimates are adjusted for bias related to network size, but RDS II weights do not account for unrelated sampling biases. Confidence intervals are often wide and should be cautiously interpreted in light of the wide range of plausible values. In addition, our study was cross-sectional and based on self-report. As such, we cannot draw conclusions about temporality, and information bias could have affected our findings. Also, access to family physicians among transgender people may have improved since data were collected in 2009 and 2010, including as a result of programs implemented specifically to achieve this aim, such as the Ministry of Health and Long-Term Care-funded Trans Health Connection.

The study collected information on both sex assigned at birth and current gender identity, reflecting best practice standards published in the years following

Table 2. Adjusted prevalence ratios for predictors of not having a family physician among transgender Ontarians ($n = 400$).

	Model 1[*]			Model 2[*]		
	Adjusted PR[†]	95% CI	P value	Adjusted PR[†]	95% CI	P value
Predisposing Factors—Traditional Domain						
Age			0.88			0.83
30 years old versus 20	0.97	(0.68, 1.40)		0.96	(0.69, 1.35)	
40 years old versus 20	0.95	(0.45, 1.98)		0.93	(0.47, 1.84)	
50 years old versus 20	0.92	(0.30, 2.80)		0.90	(0.32, 2.53)	
Marital status			**<0.01**			**<0.01**
Single (never married)	1.00			1.00		
Married/common-law	1.02	(0.42, 2.48)		1.05	(0.44, 2.48)	
Previously married	**0.03**	**(0.00, 0.23)**		**0.03**	**(0.00, 0.25)**	
Homeless or under-housed			**0.02**			**0.02**
Yes	**2.10**	**(1.17, 3.78)**		**2.14**	**(1.19, 3.84)**	
No	1.00			1.00		
Predisposing Factors—Trans-specific Domain						
Living in felt gender			0.10			0.08
Full time	1.00			1.00		
Part time	1.29	(0.68, 2.48)		1.20	(0.65, 2.21)	
Not at all	0.41	(0.15, 1.14)		0.37	(0.13, 1.05)	
Race[*] gender spectrum			0.11			0.14
Transmasculine: Indigenous and/or person of color versus White	0.99	(0.37, 2.66)		1.11	(0.44, 2.83)	
Transfeminine: Indigenous and/or person of color versus White	**2.68**	**(1.07, 6.70)**		**2.65**	**(1.09, 6.41)**	
Need Factors[‡]						
Chronic condition						0.09
Yes	—	—	—	1.00		
No				1.76	(0.96, 3.22)	

[*]Nagelkerke R^2 for Model 1 = 0.23; R^2 in Model 2 = 0.25.
[†]PR = prevalence ratio; CI = confidence interval; Values in boldface represent significant factors at $p < 0.05$.
[‡]Enabling and impeding factors were eliminated in backwards elimination, all $p > .20$.

data collection (GenIUSS Group, 2014). Data were collected before the emergence of "non-binary" as a distinct identity category within trans communities (Richards et al., 2016) and participants could select multiple gender identity options (e.g., "trans woman" and "genderqueer"), precluding categorization of respondents as either "binary" or "non-binary." Future research could consider whether health care access differs not only by gender spectrum in interaction with other axes of social position (e.g., race/ethnicity) but also by gender non-binary identification. However, sex assigned at birth and lived gender remain critical variables to consider. Sex assigned at birth has a major role in how a sexist society tolerates gender fluidity, with harsher responses to those assigned male at birth. Moreover, with respect to access to health care, gender presentation may be more salient than identity (e.g., as binary versus nonbinary), as the latter would not even enter the equation until after a conversation with the health care provider.

Conclusion

In summary, we found that among trans residents of Canada's most populous province, predisposing characteristics but neither general nor trans-specific enabling or need factors predicted not having a regular family doctor. Within the trans population, individuals who were both transfeminine and Indigenous or persons of color, or who were under-housed, were less likely to have a family doctor. These findings should motivate greater integration of intersectional frameworks and analyses in transgender health and health care research. They should also motivate interventions to increase access to low-barrier and culturally-safe (Peiris, Brown, & Cass, 2008) primary care for trans people who are Indigenous, persons of color, or with a very low income.

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