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Medical and cosmetic intervention needs, priorities and barriers of trans and non-binary youth in Quebec

Pullen Sansfaçon Annie^{a,b,c}, Fortin Geneviève^{c,d}, Gelly Morgane. A^a and Amiot Claude^a

^aCanada Research Chair on Partnership Research and Empowerment of Vulnerable Youth (CRC ReParE), University of Montreal, Montreal, Canada; ^bSchool of Social Work, University of Montreal, Montreal, Canada; ^cCentre de recherche en santé publique (CReSP), Montreal, Canada; ^dSchool of Public Health, University of Montreal (ESPUM), Montreal, Canada

ABSTRACT

Trans and non-binary (TNB) youth aged 12-17 and 16-25 represent 0.2% and 0.79% of the Canadian population respectively, likely underestimated. TNB youth face mental health challenges, sometimes related to gender dysphoria, which can be significantly improved with gender-affirming interventions. However, the needs of TNB youth are poorly documented in Quebec (Canada). This study aims to understand the gender-affirming intervention needs and desires of TNB youth in Quebec. An online survey was conducted between April and June 2023, including open-ended questions. Descriptive analyses were performed. A total of 84 TNB youth from Quebec aged 15-24 completed the survey (40% transmasculine, 20% transfeminine and 39% non-binary). The most desired intervention was hormone therapy (95%). We found gendered differences in needs, particularly for facial and upper/lower body interventions. Our findings suggest that the needs of TNB youth vary according to gender. Inequitable financial barriers persist in covered gender-affirming medical care (GAMC), disadvantaging transfeminine youth. Our data also highlighted the importance of hormone treatments for TNB youth. In conclusion, it is essential to support TNB youth by considering their needs for GAMC, offering information on all available interventions, and ensuring equitable coverage to GAMC.

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KEYWORDS

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Introduction

In Canada, it is estimated that around 0.2% of people aged 12–17 (Wang et al., 2023) and 0.79% of 16–25 years old (Government of Canada, 2021) identify as trans or non-binary (TNB), a proportion that could be underestimated and closer to 2.7% worldwide (Zhang et al., 2020). A large proportion of TNB people experience gender dysphoria, i.e. a strong sense of discomfort due to an incongruence between their gender identity and

their sex assigned at birth (American Psychiatric Association, 2013; World Health Organization, 2023). Gender dysphoria can have a major impact on the functioning of TNB youth, both individually and socially. Moreover, experiences of minority stress and violence, including transphobia, can impact the mental health of TNB people (Chelliah et al., 2024; Hunter et al., 2021). In Canada, most TNB youth perceive their mental health as poor (45%) or fair (39%) while only 16% perceive their mental health as good or excellent, and suicidal thoughts (64%) and attempts (21%) are common among them (Taylor et al., 2020). Many of them express the need for social, legal or medical transitions, which can improve their mental health (Chen et al., 2023; Coleman et al., 2022; Grannis et al., 2021; Green et al., 2022; Kuper et al., 2020; Pullen Sansfaçon et al., 2023, 2024; Rew et al., 2021; Sequeira et al., 2025; Sorbara et al., 2020; Tordoff et al., 2022; Turban et al., 2020; van der Miesen et al., 2020). Medical transition includes hormonal and surgical interventions aimed at modifying a person's physical characteristics according to their gender. Social transition, which consists of displaying one's gender expression or identity in the public space, is an important need that can be supported by inclusive, gender-affirming environments (Coleman et al., 2022).

That said, literature on the needs and desires of TNB youth in the province of Québec is scarce. A community sample of 220 TNB youth in Quebec has shown that only 15.9% of 14-25-years-olds had used puberty blockers, and 51% of them had used hormone therapy (Pullen Sansfaçon et al., 2024). Among those who had a surgery, the top surgeries were the most popular (10%). However, this study did not examine differences by gender among participants. In Canada, two studies have examined youth needs, desires, and barriers to accessing gender-affirming medical care (GAMC) in specialized clinics. A qualitative study with 36 youth aged 9-17 years in three Canadian clinics found that youth faced unnecessary delays, protocol or clinic restrictions and a lack of non-binary care options (Pullen Sansfaçon et al., 2019). This study did not look at gender-based differences between the needs and desires of youth, however stopping puberty progression was important for all, including non-binary youth. Another study of 174 youth under the age of 16 experiencing gender dysphoria in 10 Canadian clinics showed some gendered differences, with puberty blockers provided to 53% of transfeminine youth compared to 45.2% of transmasculine youth (Bauer et al., 2021).

In the United States, a cross-sectional survey of 230 TNB youth aged 18 to 20 highlighted some barriers that were more likely to be experienced by youth who identified as femalethan those identifying as male, such as needing to be out to their parents to discuss their needs and obtain their consent. Moreover, 79.6% of participants desired both

puberty blockers and gender-affirming hormones, but non-binary participants were less likely to wish such a combination and were more likely to want only blockers compared to participants who identified as female. Participants assigned female at birth were also more likely to want only hormone therapy than those assigned male at birth (Sequeira et al., 2025).

Regarding access in Canada, a study found that 43% of TNB youth were unable to access the health care they needed (Taylor et al., 2020), compared with 4% of the general population (Trans PULSE Canada, 2020). In various studies in the United States, Canada, England, the Netherlands, and Australia, many individual, social, or systemic barriers to GAMC for youth have been identified (Carlile et al., 2021; Ross et al., 2023; Sequeira et al., 2025; Strauss et al., 2022). Notably, participants report an inability to pay for treatments or treatments not being covered by insurance (Lee et al., 2024; Puckett et al., 2018; Thoreson et al., 2020), difficulty accessing a specialist who can help them (Carlile et al., 2021; Strauss et al., 2022; Taylor et al., 2020), and the lack of parental support (Sequeira et al., 2025; Taylor et al., 2020). In Canada, GAMC interventions can be covered by provincial insurance plans. However some interventions remain at the patient's expense, in particular feminizing procedures (Government of Canada, 2024). Moreover, in Quebec, access to gender-affirming interventions follows WPATH recommendations (Coleman et al., 2022). For hormonal interventions, eligibility is based more on development than on age, with Tanner stage 2 as a criterion, as well as capacity to consent (from age 14, or with parental consent if younger) (Coleman et al., 2022; Ministère de la Santé et des Services sociaux, 2023). However, it is generally necessary to wait until the age of 16 for mastectomy and 18 for other surgeries (GrS Montreal, s. d.).

As the literature review highlighted, barriers are well documented, but knowledge about needs and desires of TNB youth remains limited, especially when comparing across gender. In this article, we explore the experiences of TNB youth aged 14-25 in Quebec (Canada) regarding GAMC, paying attention, when possible, to gender differences. Specifically, the objectives were to document their needs and desires for GAMC interventions, to identify priorities and to better understand the barriers faced by TNB youth. In this article, we sometimes talk about 'cosmetic interventions' to refer to interventions that are not covered by some provincial insurance plans because they are not medically prescribed and thus considered 'cosmetic', such as laser hair removal. However, these interventions often play an important role in affirming one's identity and require the involvement of certified or medical professionals, which is why we chose to include them under the umbrella of 'GAMC'.

Methods

The study is a citizen initiative that was launched as part of the ENGAGEMENT program of the Fonds de recherche du Québec (Fonds de recherche du Québec, 2022). CA, a citizen who had begun her transition in her sixties, wondered about the needs for medical and cosmetic interventions among TNB people. Through this program, CA submitted a research question: What gender-affirming interventions are prioritized by people who have experienced, are experiencing or are questioning their transition? A partnership was established between CA and APS, a full professor and researcher, and her team. The research project 'Becoming oneself through surgeries: a citizen exploration in gender-affirming research' was born. This article presents results specific to 14–25-year-olds as part of this larger study which included TNB people of all ages in Québec.

Study design and questionnaire

A cross-sectional study design with a qualitative component was used for this study to get an overview of TNB people's experiences regarding gender-affirming interventions. Following a literature review to better understand the current situation, an online survey was developed and included three sections: sociodemographic information; transition-related medical and cosmetic desires and needs; and transition-related medical and cosmetic priorities. The sociodemographic questions were adapted from the Trans PULSE questionnaire (Bauer et al., 2015). The questionnaire was revised following comments from TNB youth and their parents who were consulted through the permanent advisory board, supported by the Canada Research Chair on Partnership Research and Empowerment of Vulnerable Young People, and its research team. The final questionnaire was in French and consisted of 41 questions, including 7 open-ended questions and 5 questions on barriers which allowed participants to develop their answers in greater depth if they answered 'yes', enriching the questionnaire qualitatively. In this article, we present qualitative responses to the question 'We'd like to know why interventions desired but not obtained are important to you' which was asked for the four categories of interventions. This question was not filtered, so some participants talked about the importance of interventions already obtained. Gender-affirming medical and cosmetic interventions were grouped in four categories (Table 1).

Data collection

Data collection took place over 3 months between April and June 2023. Inclusion criteria were: (1) being over 14 years old; (2) residing in the province of Quebec, Canada; (3) identifying as trans or non-binary (or



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Table 1.	Gender-affirming	i medicai and	i cosmetic	interventions	aroupea in	Tour categories.

Categories of interventions	Specific interventions
Hormone therapy or hormones and puberty blockers	Feminizing hormone therapy
	Masculinizing hormone therapy
	Hormone and puberty blockers
Facial interventions	Facial feminization
	Facial masculinization
	Thyroid cartilage reduction
	Hair implants
	Laser/electrolysis hair removal
	Beard transplant
Upper or lower body interventions (excluding facial and sexual	Breast augmentation
and reproductive organs)	Breast reduction
•	Mastectomy/torsoplasty
	Shoulder reduction
	Hip liposuction
	Hip and/buttock lipofilling
Sexual and reproductive organs	Vaginoplasty
•	Vulvoplasty/clitoroplasty
	Orchiectomy
	Hysterectomy
	Oophorectomy
	Metoidioplasty
	Phalloplasty
	Penile prothesis/phallo stage 2
	Scrotoplasty
	Testicular implants

any similar identity); and (4) having received or desiring to receive one or more medical or cosmetic interventions. Minors did not need parental consent to participate. The link to the questionnaire was shared with 62 organizations related to our population and topics of interest. A total of 340 participants were recruited and started the questionnaire. A final sample of 223 participants of all ages fully completed the questionnaire, including 84 participants aged 14-25.

Data analysis

Data were analyzed using Stata/MP 14.2 and SPSS 28. During data cleaning, many variables were recoded to ensure consistency in the analysis. Participants aged 14-25 were identified for age-specific analysis. Given the small sample size (84 youth participants), several variables were combined. For example, for gender identity, participants could choose more than one option, but for analysis purposes, we grouped gender identities into 3 categories: transfeminine people, transmasculine people, non-binary people (which included people who selected multiple answers or selected 'questioning'). For this article, as the aim was to provide an overview of experiences, including needs, related to medical and cosmetic interventions among youth in this age group specifically, we focused on descriptive analyses. Youth represented a portion of our small sample that allowed us to describe their situation and fill an important gap in the literature on TNB youth, but did not allow us to conduct more complex statistical

analyses. Therefore, we conducted univariate and bivariate descriptive analyses, focusing on gendered differences when applicable. Chi-square tests were used to assess whether the differences between groups were significant at a 0.05 threshold. Given the sample size and the way in which the questions were formulated in the questionnaire (participants could select obtained *and* desired simultaneously), it is impossible to disaggregate data and analyze those who received the interventions separately from those who only desired them. Responses from participants were therefore regrouped and presented as interventions that were, at some point, needed or desired, regardless of the outcome. Our rationale is that interventions are usually obtained following the expression of a need. Those who mention desiring the intervention also express an unmet need.

Sample size also prevented us from analyzing priorities by gender of the participants. We therefore analyzed the data by categories of intervention, and for clarity, we added specific information about most needed interventions in the text. Qualitative responses were used to complement quantitative results, and where relevant, to add nuance or specificity.

Ethics

Ethics approval was obtained from the Society and Culture Research Ethics Committee (CER-SC) of [anonymized]. All participants provided informed consent prior to completing the questionnaire. No compensation was offered to participants.

Results

Youth participants (n=84) were aged 14-17 (n=22; 26%) and 18-25 (n=62; 74%). As the sample by age subgroup is quite small, the results are presented by grouping all participants as 14-25-year-olds. In terms of gender, 40% (n=34) of youth identified as transmasculine, 20% (n=17) as transfeminine, and 39% (n=33) as non-binary. In terms of race, only 3.6% declared being racialized and 2.4% did not know. Sociodemographic characteristics are presented in Table 2.

Medical and cosmetic intervention needs

The interventions received or desired by youth provided an overview of their needs for different types of medical and cosmetic interventions. Depending on gender, needs varied greatly, and interventions were desired for different reasons. Table 3 summarizes the procedures received or desired by type of procedure (hormones and puberty blockers; facial; upper or

	Table 2.	Sociodemographic	portrait of	vouth partici	pants $(n=84)$.
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Characteristic	n	%
Age		
15–17	22	26.2
18–25	62	73.8
Gender		
Transmasculine	34	40.5
Transfeminine	17	20.2
Non-binary	33	39.3
Region		
Montréal	21	25.9
Estrie	13	15.3
Montérégie	12	14.1
Other regions*	38	44.7
Racialized person		
Yes	3	3.6
No	79	95.2
Doesn't know	2	2.4
Access to a general practitioner		
Yes	60	70.6
No	23	28.2
Doesn't know	1	1.2

^{*}Other regions include Capitale-Nationale, Centre-du-Québec, Chaudière-Appalaches, Lanaudière, Laurentides, Laval, Mauricie, Nord-du-Québec, Outaouais and Saguenay-Lac-Saint-Jean.

Table 3. Medical and cosmetic interventions received or desired by all youth (n=84) and by specific gender.

					Ву	gender g			
	All parti	•		asculine = 34		eminine = 17		oinary 33	
Intervention	N	%	n	%	n	%	n	%	p value
Hormones/blockers	80	95	34	100	17	100	29	88	0.04
Facial	33	39	6	18	16	94	11	33	< 0.001
Upper/lower body	72	86	34	100	9	53	29	88	< 0.001
Sexual and reproductive organs	60	71	24	71	14	82	22	67	0.5

lower body; sexual and reproductive organs) and gender (transmasculine; transfeminine; non-binary).

As displayed in Table 3, hormones and puberty blockers were the most common interventions received or desired by youth (over 95% of participants). Findings suggest significant gendered differences for some interventions, such as facial interventions: 94% (n=16) of transfeminine participants compared with 17% (n=6) of transmasculine and 33% (n=11)of non-binary participants (p < 0.001). Detailed results and gendered differences for each type of intervention are further described below.

Hormones and puberty blockers

Hormones and puberty blockers were used or desired by all transmasculine and transfeminine participants, with a slightly lower proportion observed in non-binary youth (88%; n = 29). Our findings showed a strong desire among transmasculine and transfeminine youth to develop or reduce

certain gendered characteristics through hormonotherapy, as expressed by these two participants:

Thanks to them, my voice would be deeper, I'd have more hair and it would be easier to build muscle mass. (Participant 222, transmasculine)²

I consider this to be very important for me because it will make me feel a thousand times better about my body. Every day I have to wake up with a body that society identifies as a guy's body. It's a big weight on my back that I have to carry around all the time. [...] (Participant 283, transfeminine)

As described here, many transmasculine and transfeminine youth used hormones to alleviate gender dysphoria. Among non-binary participants, this desire was less unanimous and appeared more complex to navigate:

I've thought about taking 'male' hormones to maybe look more non-binary, but I fight the idea that I have to look non-binary to give credibility to my gender identity. Besides, it seems like a long and rigorous process that I'm not interested in undertaking. I prefer to take my time and make cosmetic changes first as my dysphoria is very manageable. (Participant 300, non-binary)

Moreover, although most participants (95%; n = 80) used or desired hormones, only 29% (n = 24) used or desired puberty or hormone blockers. Since puberty blockers are used to prevent the development of gendered characteristics, this result may suggest that many participants did not access them early enough.

Facial interventions

Significant gendered differences were observed among youth who had undergone or wished to undergo facial interventions (Table 3; p < 0.001). Laser hair removal or electrolysis (25%; n = 21), facial feminization (13%; n = 11), andthyroid cartilage reduction (9%; n = 8) were the three most received or wanted facial interventions among our youth sample. These interventions were particularly needed by transfeminine youth. When asked why facial interventions are important, one participant even mentioned that it was a matter of safety for her:

Society is less and less welcoming towards trans people, and there is more and more attention paid to transfeminine people. It therefore seems important to me to have better passing to stay safe. (Participant 145, transfeminine)

Upper or lower body interventions

Unlike facial procedures that were more popular among transfeminine youth participants, interventions targeting the upper or lower body (excluding the sexual and reproductive organs) were a much more common need among transmasculine youth (Table 3). Indeed, all transmasculine youth (100%;

n=34) received or desired such interventions, compared to 53% (n=9) of transferminine and 88% (n=29) of non-binary participants (p < 0.001). Consistent with this, the most popular upper and lower body interventions were those most commonly sought by transmasculine people, such as mastectomy (100% of transmasculine youth (n=34)) and hip liposuction (26%) of transmasculine youth (n=9)). Indeed, several transmasculine participants expressed strong gender dysphoria associated with their breasts and hips.

Gender dysphoria is no joke. I hurt my ribs using a binder because I don't like my body. I don't want people to see my chest. This part of my body brings me a lot of distress. I don't want to live my life with this discomfort that ruins most of my days. Often, I don't wear the clothes I want simply because my chest is too visible. Especially in the summer I wear more layers than I can take, so people can't see. It's very disabling. Top surgery could save my life. (Participant 269, transmasculine)

I experience dysphoria related to my hips. I have a lot of difficulty finding 'masculine' clothes that fit my size and are not too tight around my hips. (Participant 3, transmasculine)

Similarly to how mastectomy was important for transmasculine youth, breast augmentation was a significant need for transfeminine youth who wished or had received this intervention (47%; n=8), though not for all. Indeed, some transfeminine youth expressed how they wished to wait to see the effects of the hormones on their body before deciding to get such surgery:

I find cosmetic surgeries to be a sort of 'Plan B' if I don't like the results of hormones. If I don't want it, I won't do it; the risks are always there. (Participant 134, transfeminine)

Interventions on sexual and reproductive organs

Interventions on sexual and reproductive organs are those where we observed the least difference between genders (Table 3), which were not significant (p = 0.5). Still, the most popular procedure was hysterectomy (56% of transmasculine youth (n=19) and 51% of non-binary youth (n=17)), suggesting an important need among TNB youth with a uterus. Some participants expressed discomfort with menstruation or fear of becoming pregnant, as they associated their gender identity with a body that should not perform these functions.

I would rather be infertile than capable of procreating like a mother. My appearance doesn't bother me (at least not in the last few years), but it's frustrating to know that I'm biologically capable of giving birth when that shouldn't be the case. (Participant 217, transmasculine)

The fear of getting pregnant or even just having my period back if I stop my testosterone. (Participant 89, non-binary)

Other participants wished they could access interventions related to sexual and reproductive organs to improve their sex life and their self-esteem:

It bothers me enormously to have the body part I have. It makes me look horrible among other people and frankly it can make my sex life inexistent or much harder and for reasons of dysphoria it could help me a lot. (Participant 118, transfeminine)

Medical and cosmetic intervention priorities

Priorities are presented by grouping TNB participants of all genders (40% transmasculine; 20% transfeminine; 39% non-binary) and by type of intervention (Figure 1). The interventions desired or received are in line with participants' stated priorities. Indeed, 67% of participants considered hormones and puberty blockers to be the highest-priority intervention (Figure 1), which was also the most desired or received intervention (Table 3). Similarly, facial interventions were considered the lowest priority (51%), although there are gendered differences in youth who desired or have received this type of intervention (Table 3) which are not reflected in the priority rankings.

To better weight and standardize priorities, a priority score was assigned to each intervention category (Figure 2). Hormone and puberty blocker interventions remained the highest priority (priority score = 3.65/4), and facial interventions the lowest priority (priority score = 1.85/4).

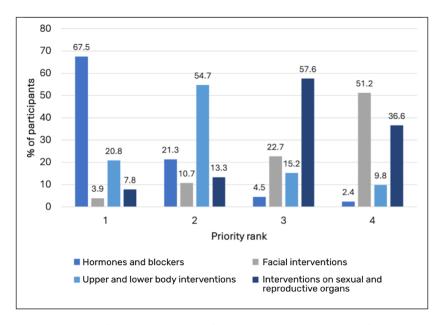


Figure 1. Priority rank for each category of interventions. Percentages of participants who ranked the interventions for each rank are presented, with rank 1 being the most important.

Barriers to medical and cosmetic interventions

Among youth participants who wanted an intervention but had not yet received it, we asked them if they faced any barriers (Table 4). Youth faced the most barriers in accessing interventions on sexual and reproductive organs (68%; n = 37/44). The specific barriers faced by youth for each type of intervention are detailed below.

Hormones and puberty blockers

Hormones and puberty blockers are the only interventions to which most participants who want it but have not yet received it were facing no barrier (56%; n = 13). For those who did face barriers to access hormones or puberty blockers, 3 participants mentioned age restrictions, and 2 financial barriers.

All forms of bioidentical hormones should be covered by RAMQ, especially 'injections', which are very expensive. [...] As far as I'm concerned, the cost of these interventions is the only obstacle. (Participant 97, transfeminine)

Facial, upper and lower body interventions

Similarly, the most common barrier to facial interventions among participants was the financial barrier (76%; n = 13/17). For some, fears or doubts associated with a lack of information added to the financial barriers:

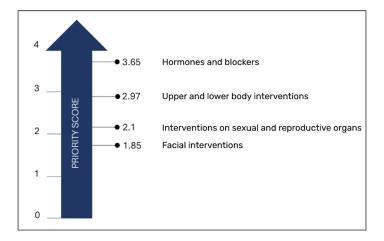


Figure 2. Priority score for each category of interventions. Scores are presented for each category of interventions, with a score of 4 being the highest and most important. Scores were measured using this formula: (% of participants who ranked $#1 \times score 4 + %$ of participants who ranked #2 \times score 3 + % of participants who ranked #3 \times score 2 + % of participants who ranked #4 \times score 1)/number of participants.

Table 4. Barriers to medical and cosmetic interventions desired but not yet received among youth participants who faced a least one barrier (n=61).

Barriers faced by type of intervention	n	%
Hormones/blockers (N = 23)*		
No barrier	13	56.5
All barriers	10	43.5
Age restrictions	<5	
Restrictions related to my residency status	<5	
Financial barriers	<5	
Lack of support from relatives	<5	
Fears related to the procedure	<5	
Facial interventions (N=30)		
No barrier	12	41.4
All barriers	1 <i>7</i>	58.6
Restrictions related to my residency status	<5	
Financial barriers	13	76.5
Lack of support from relatives	<5	
Fears related to the procedure	<5	
Upper/lower body interventions (N = 51)		
No barrier	19	37.2
All barriers	32	62.8
Age restrictions	5	15.6
Restrictions related to my residency status	<5	
Restrictions due to my medical and/or psychological condition <5	<5	
Financial barriers	12	37.5
Barrières logistiques	<5	
Lack of support from relatives	<5	
Fears related to the procedure	<5	
Lack of inclusive and transaffirmative care in my region	<5	
Other	<5	
Interventions on sexual and reproductive organs (N=44)		
No barrier	1 <i>7</i>	31.5
All barriers	<i>37</i>	68.5
Age restrictions	7	18.9
Restrictions dues à ma condition médicale et/ou psychologique	<5	
Financial barriers	7	18.9
Logistical barriers	<5	
Lack of support from relatives	<5	
Fears related to the procedure	12	32.4
Lack of inclusive and transaffirmative care in my region	<5	
Other	7	18.9
All		
No barrier	23	27.4
At least one barrier	61	72.6

*N represents the number of participants who desired this type of intervention but had not received it yet.

I'm not interested because of a lack of information and data assuring me that the risks are minimal, and the prices far too high for cosmetic treatments that often require more than one appointment. (Participant 302, transmasculine)

Financial barriers were also the most important barrier to youth who desired upper and lower body interventions but had not received them (37%; n = 12/32). Some also mentioned fearing the interventions (12%; n = 4/32).

Interventions on sexual and reproductive organs

For interventions on sexual and reproductive organs, the main barrier was fear of the intervention (32%; n = 12/37). Financial and age barriers were

also equally important (19%; n = 7/37 for each barrier). Our qualitative data provided more insights into those barriers, suggesting a strong need for clear, accessible information for youth with concerns, doubts or questions about the process and interventions.

Because of my studies and career, I can't afford to stop while I recover and have surgery-related consequences afterwards. (Participant 244, transmasculine)

I don't want to lose my fertility because I still want biological children without carrying them myself. (Participant 94, transmasculine)

I am facing difficulties obtaining all recommendations from doctors and psychologists (4 in total). (Participant 201, transmasculine)

Discussion

Our study explores the needs and priorities of TNB youth in Quebec (Canada) in terms of medical and cosmetic interventions, providing a portrait of the challenges they face. The needs and priorities of TNB youth vary considerably by gender, particularly when it comes to medical and cosmetic facial interventions, as well as upper and lower body interventions. Our findings suggest that access to GAMC should be tailored to reflect gender-specific differences.

This study contributes to knowledge about GAMC needs for TNB youth and captures some gendered differences, a dimension that is rarely examined among this population. These gendered differences raise concerns about gender equity in access to gender-affirming medical and cosmetic interventions. For example, facial interventions are most desired by transfeminine youth and can improve their safety, yet they are often not covered by insurance, as is the case in Québec (Éducaloi, 2024). Conversely, upper and lower body interventions, most desired by transmasculine or non-binary youth, are more often covered. This creates inequitable financial barriers for transfeminine youth (and some non-binary youth) whose important GAMC needs are not covered—unlike those of transmasculine youth. Addressing these inequities is crucial as such care can significantly improve mental health outcomes (Almazan & Keuroghlian, 2021).

In the United States, the 2015 U.S. Transgender Survey observes that most transmasculine adults want or have received upper body surgery or a hysterectomy while most transfeminine people want or have received facial electrolysis (Almazan & Keuroghlian, 2021; James et al., 2016). Although this survey does not specifically focus on youth, the results align with ours, suggesting that gendered differences in GAMC needs persist across age groups and countries. Analyses by gender and age group would be valuable to compare needs and barriers between younger and older groups, while considering gender.

Our findings also highlight the importance of hormonal interventions for TNB youth, ranked as top priorities. These interventions significantly improve mental health and TNB youth's well-being by reducing, among other things, gender dysphoria and body dissatisfaction (Chen et al., 2023; Grannis et al., 2021; Green et al., 2022; Kuper et al., 2020; Pullen Sansfaçon et al., 2023; Rew et al., 2021; Tordoff et al., 2022; Turban et al., 2020; van der Miesen et al., 2020). Despite their benefits, only 29% of our sample want or have received puberty blockers, possibly due to limited or late access, lack of awareness, or lower perceived relevance compared to other hormone treatments. Indeed, puberty blockers may not directly reduce gender dysphoria, as they do not actively promote body/gender concordance (Salas-Humara et al., 2019). However, puberty blockers can improve mental health (Salas-Humara et al., 2019) and reduce the need for other future interventions by preventing the appearance of unwanted puberty-related features, such as facial hair or breast growth (Ashley, 2019; Salas-Humara et al., 2019). More so, puberty blockers provide time for gender exploration (Ashley, 2019). Hormones can also facilitate gender exploration, and some youth wait to see their effects before undertaking other interventions. GAMC needs cannot simply be carried out upstream of the transition and should be assessed continuously, as needs may evolve throughout the medical transition process.

Finally, interventions on sexual and reproductive organs are desired by a large proportion of participants, regardless of gender, even though it is no longer required to change one's legal sex marker in Québec (Ministère de l'Emploi et de la Solidarité sociale, 2024). However, TNB youth have apprehensions and face many barriers when trying to access these interventions. Therefore, better support is necessary to address their questions, fears and doubts regarding these procedures.

Our study has several notable limitations. Our small sample does not allow us to establish causal relationships, measure risk factors or generalize our results. The descriptive analysis provides an overview of the needs of TNB youth in Québec that could be explored in more depth in future studies. However, it was not possible to consider gender in all analysis. For example, although priorities are not presented by gender, our analysis still provides an overview of the priorities among TNB youth in Québec. Moreover, after a community consultation, we decided not to ask for the sex assigned at birth, as it is sometimes perceived as offensive. This limits data interpretation, especially for nonbinary youth. Additionally, the categories of some variables had to be grouped for uniformity, which certainly erased some subtleties in the participants' responses. However, the addition of open-ended questions mitigates this and strengthens the interpretation of the data.

Conclusion

Our study provides a portrait of TNB youth needs for gender-affirming medical and cosmetic interventions, a poorly documented situation in Québec (Canada). We have shown that needs and priorities of TNB youth vary by gender, and that it is essential to consider gendered differences in GAMC. However, it is concerning that TNB youth face many barriers to care that could significantly improve their mental health and well-being. These barriers are inequitable—particularly financial ones—and insurance coverage policies should be reviewed to better account for gendered differences in needs.

Notes

- 1. The term "racialized" (or the French term "racisé" in the original survey) originates in postcolonial and critical race studies. It highlights the social process through which people who are not white are assigned a racial identity, typically from a white, colonial perspective.
- 2. Quotes have been freely translated from French.

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Authors contributions

Claude Amiot and Annie Pullen Sansfaçon contributed to the study conception and design. Data collection tools and materials were developed by Claude Amiot and Annie Pullen Sansfaçon. Claude Amiot and Annie Pullen Sansfaçon contributed to the data collection and analysis and Morgane Gelly contributed to the data analysis. All authors contributed, to various extents, to the first draft of the manuscript. All authors read and approved the final manuscript.

Disclosure statement

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Notes on contributors

Pullen Sansfaçon Annie is a professor in the school of Social Work at the University of Montreal and the holder of the CRC-ReParE. Her work, at the crossroads of social work

and ethics and rooted in trans-affirmative and anti-oppressive perspectives aims to understand and empower vulnerable youth, especially those from gender diverse groups.

Fortin Geneviève is a PhD Candidate in public health, specialized in global health, at the University of Montreal in Canada. She is interested in sexual and reproductive health, as well as adolescent and women's health. She has research experience in Uganda, Senegal, Bangladesh and Canada, where she has worked using community-based participatory approaches.

Gelly Morgane A. is a Senior Research Advisor for the Canada Research Chair in Partnership Research and the Empowerment of Vulnerable Youth (CRC-ReParE) at the University of Montreal. Anchored in a trans-affirming perspective, their work focuses on the health, rights and well-being of gender diverse youth.

Amiot Claude is co-recipient of a research grant from the Engagement program of the Fonds de recherche du Québec. She joined the research team in 2021 as a Citizen Researcher. She is president of Entraide Trans Saguenay-Lac-Saint-Jean, a witness for the Pour que vieillir soit Gai program and a governor of Fondation Émergence.

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