

Greta Bauer¹, Margaret Lawson², Sandra Gotovac¹, Bob Couch³, Jen Ducharme⁴, Stephen Feder², Shuvo Ghosh⁵, Cindy Holmes⁶, Dan Metzger⁷, Arati Mokashi⁸, Danièle Pacaud⁹, Annie Pullen Sansfaçon¹⁰, Jake Pyne¹¹, Joe Raiche¹², Elizabeth Saewyc¹³, Kathy Nixon Speechley¹, Françoise Susset⁵, Julie Temple-Newhook¹⁴, for the Trans Youth CAN! Research Team

1. Epidemiology and Biostatistics, Western University, London, ON; 2. Diversity Clinic, Children's Hospital of Eastern Ontario (CHEO), Ottawa, ON; 3. University of Alberta, Edmonton, AB; 4. University of Manitoba, Winnipeg, MB; 5. Meraki Health Centre, Montreal, QC; 6. Social Work, University of Victoria, Victoria, BC; 7. BC Children's Hospital, Vancouver, BC; 8. IWK Health Centre, Halifax, NS; 9. Alberta Children's Hospital, Calgary, AB; 10. Université de Montréal, Montreal, QC; 11. University of Guelph, Guelph, ON; 12. University of Calgary, Calgary, AB; 13. University of British Columbia, Vancouver, BC; 14. Memorial University, St. John's, NL

ABSTRACT

Purpose: There has been an exponential rise in the number of trans and non-binary youth referred to clinics for puberty suppression and/or hormone therapy. Controversies regarding treatment highlight the urgent need for information on gender-affirming care and outcomes for trans and non-binary youth and their families. The rapid growth of Canadian specialist clinics focused on trans and non-binary youth presented a unique opportunity for research at a crucial time-point, and for a sample that is larger than previous studies. Information is needed regarding trans and non-binary youth accessing clinics, their pathways to care, short- and long-term experiences with puberty suppression or hormone therapy, side effects, parent/caregiver experiences, and impacts on other medical, social and mental health outcomes. Trans Youth CAN! is the first pan-Canadian cohort study of youth referred for puberty suppression and/or hormone therapy.

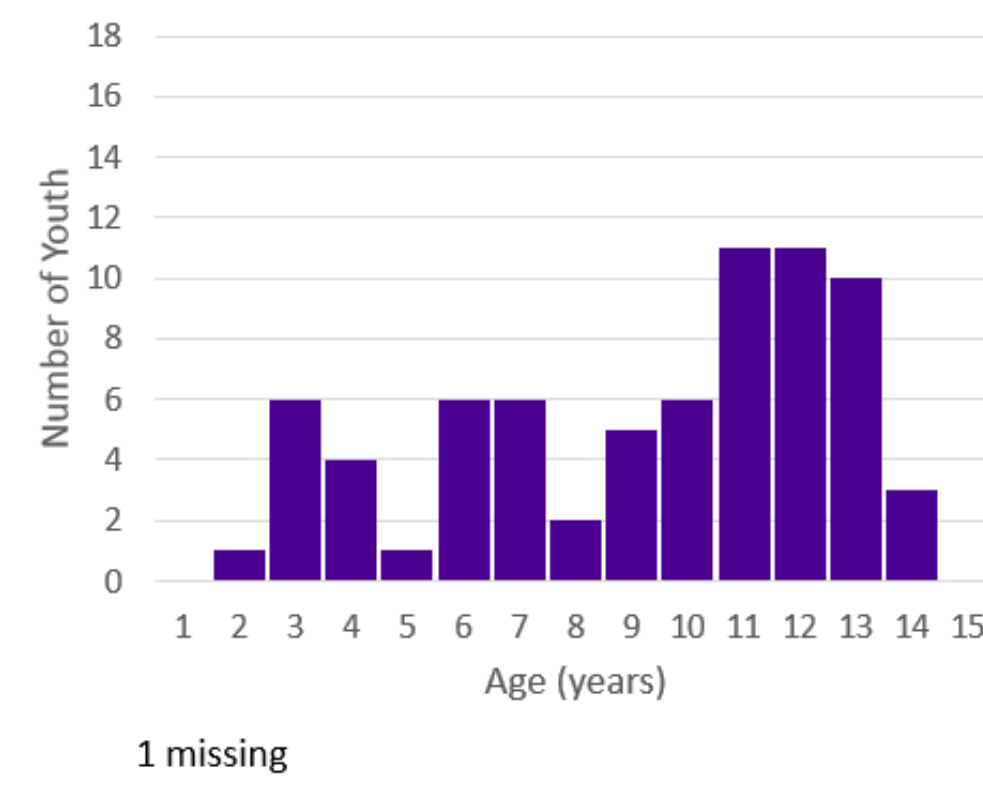
Materials and Methods: Eligible youth were aged from puberty to 15 years, and were attending their first visit after referral for puberty suppression and/or hormone therapy at one of ten Canadian clinics. Youth participants completed a baseline survey conducted by personal interview, and will complete follow-up surveys at 12 and 24 months, during their regular clinic visits. They are also completing a brief online checklist at 3-months intervals to assess self-reported physical and mental health as well as transient symptoms of hormone therapy. Clinical case report forms are used to extract data following all clinic visits after referral and over the two-year follow-up period. Parent or caregiver participants self-completed an online survey at baseline, and will complete this again at 12 and 24 months.

Results: We will present a preliminary cohort profile of youth and parents/caregivers at baseline. We will present descriptive statistics characterizing the sociodemographics of both youth and parent/caregiver samples. We will also present a preliminary overview of the physical and mental health of trans and non-binary youth at referral, their pathways to care, and their parent/caregiver experiences.

Conclusion: We expect our study will result in changes to medical care, social services, and youth and family decision-making, and will provide a well-rounded picture of medical, psychosocial and family health at referral and with treatment. Given limitations in existing research, the proposed study takes advantage of an opportunity to unite clinicians, researchers, and knowledge users in a national cohort study to produce highly original research across multiple fields, with the potential for impact

Fig. 1. Gender: Developmental timing

Age Realized Gender was Different



Age Started Living in Gender



KEY POINTS

- At referral for puberty suppression or gender-affirming hormone therapy, 80.6% of youth were living in their preferred gender (e.g., using name and pronoun) all the time, and 97.2% at least some of the time
- A similar proportion were immigrant families as for Canada in general, though being Indigenous was more common than in the general population
- Nearly all youth reported they had a stable living situation and were in school
- The most common diagnoses noted by physicians at the referral visit were anxiety, depression, and ADHD; 30.1% had seriously considered suicide and 9.6% had attempted suicide in the previous year
- Both gender distress and gender positivity were high overall
- Most parent/caregiver participants (88.4%) were parents from birth; 7.3% were adoptive parents
- 97.1% of parents/caregivers reported that their family or youth had consulted with at least one other professional or leader prior to this appointment

Table 1. Characteristics of youth (n=73)

Gender identity	n	%
Female/feminine	19	26.0
Male/masculine	48	65.8
Non-binary	6	8.2
Living in preferred gender (n=72)	n	%
All the time	58	80.6
Some of the time	12	16.7
No	2	2.8
Background (n=69)	n	%
Indigenous	14	20.3
Immigrant family	13	18.8
Non-immigrant family	42	60.9
Residence	n	%
City	39	53.4
Suburb	20	27.4
Rural area	14	19.2
School	n	%
Public school	68	93.2
Private school	3	4.1
Homeschooled	2	2.7
Not in school	0	0.0
Living situation	n	%
Have stable place to live	70	95.9
Always have enough food	63	86.3
Living with parent(s)	70	95.9
Diagnoses (n=52)	n	%
Anxiety	27	51.9
Depression	22	42.3
Attention deficit disorder (ADHD)	15	28.9
Autism spectrum	3	5.8
Personality disorder	0	0.0
Eating disorder	0	0.0
Obsessive compulsive disorder (OCD)	0	0.0
Post-traumatic stress disorder (PTSD)	0	0.0
Past-year suicide risk	n	%
Seriously considered	22	30.1
Attempted	7	9.6
Timeline to care	mean	SD
Years since knew gender	4.16	3.13
Months since seeking hormones	15.59	12.77
Gender measures	mean	SD
Gender distress ^a	3.68	0.64
Gender positivity ^a	3.45	0.67

a. Possible range is 1 to 5; higher indicates more

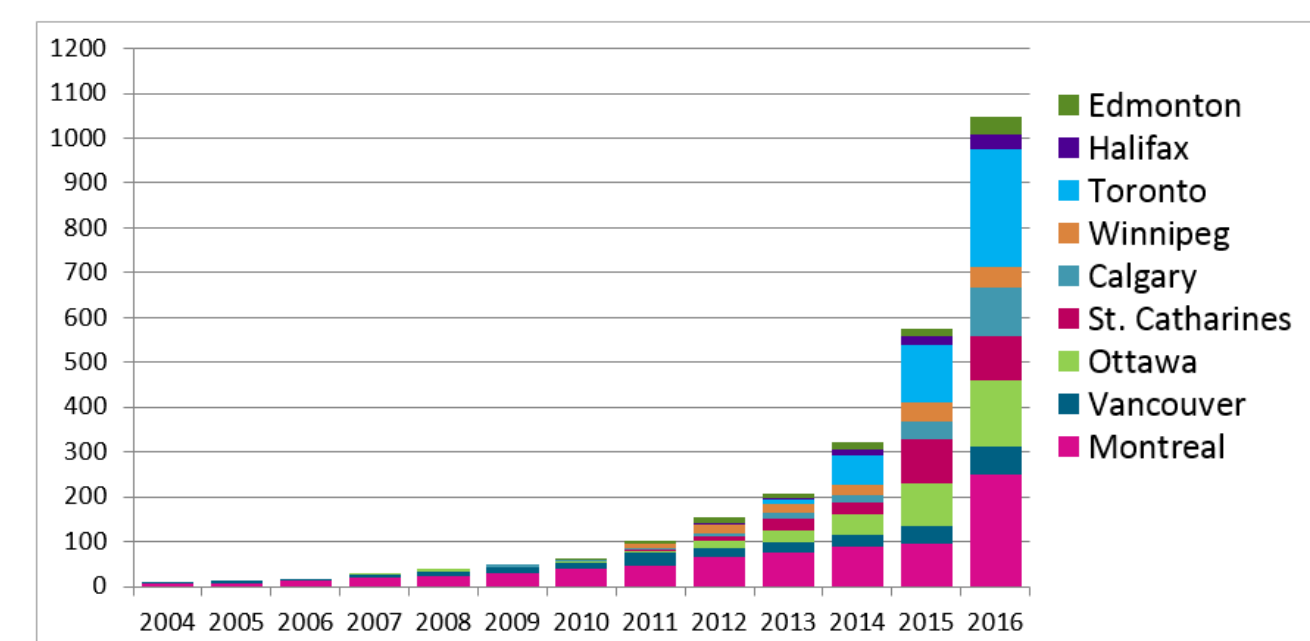
Table 2. Characteristics of parents/caregivers (n=69)

Relationship to youth	n	%
Parent from birth	61	88.4
Adoptive parent	5	7.3
Foster parent	1	1.4
Step-parent	1	1.4
Other main caregiver (grandmother)	1	1.4
Gender identity	n	%
Female	56	81.2
Male	12	17.4
Non-binary or something else	1	1.4
Family religiosity	n	%
Not at all / a bit	45	65.2
Somewhat / fairly	19	27.5
Quite / extremely	5	7.2
Professional/leader met with prior to visit^a	n	%
Family doctor	46	66.7
Psychologist	40	58.0
School counsellor	24	34.8
Pediatrician	22	31.9
Other type of counsellor	21	30.4
Psychiatrist	16	23.2
Community group	14	20.3
Adolescent medicine specialist	10	14.5
Endocrinologist	8	11.6
Indigenous elder	2	2.9
Nurse practitioner	1	1.4
Religious leader	1	1.4

a. Participants may indicate more than one; total will not sum to 100%

BACKGROUND

Trans and non-binary youth have been increasingly referred to clinics across Canada for puberty suppression or cross-sex hormones as part of gender-affirming medical care (1)



* Some referral numbers estimated. Some referrals are for prepubertal youth, though blockers are not prescribed prior to puberty.

METHODS

- Youth are recruited at first referral visit for puberty suppression or cross-sex hormones at any of ten clinics in Halifax, Montreal, Ottawa, Toronto, Hamilton, London, Winnipeg, Calgary, Edmonton, or Vancouver
- Eligibility criteria: age puberty to <16, able to complete interview in English or French
- Where possible, a parent or caregiver is also enrolled to complete the parent/caregiver surveys
- Data will be collected from youth via interviewer administered survey at baseline, 12 months, and 24 months, via brief online checklist at 3-month intervals
- Clinical data, including medical history and laboratory results will be extracted from electronic medical records into case report forms at regular intervals
- Data will be collected from parents/caregivers via self-completed online survey at baseline, 12 months, and 24 months
- Surveys were designed based on previously validated measures, survey design and clinical expertise of team members, and community expertise of both youth and parent consultation groups (in English and French)
- Data presented here are for the first 73 youth and 69 parents/caregivers enrolled at baseline; clinical case report data were complete for 52 youth

REFERENCES

- Bauer G, Lawson M, for the Trans Youth CAN! Team. Trans Youth CAN! Introducing a new study of medical, family and social outcomes for trans youth referred to clinics for hormone treatment. Poster presentation: *Canadian Professional Association for Transgender Health Conference*, Vancouver, BC. 27 October 2017.

ACKNOWLEDGEMENTS

The Trans Youth CAN! Study Team would like to acknowledge and thank the trans youth and their families who have generously shared their time and experience with us. The Trans Youth CAN! Study was funded by the Canadian Institutes of Health Research (Funding Reference Number 148641). The Trans Youth CAN! Research Team members are: Greta Bauer, Margaret Lawson, Joey Bonifacio, Bob Couch, Jen Ducharme, Steve Feder, Lorraine Gale, Shuvo Ghosh, Loralee Gillis, Sandra Gotovac, Cindy Holmes, Natasha Johnson, Carys Massarella, Dan Metzger, Arathi Mokashi, Danièle Pacaud, Mark Palmert, Jake Pyne, Joe Raiche, Elizabeth Saewyc, Annie Pullen Sansfaçon, Kathy Nixon Speechley, Françoise Susset, Robby Stein, Julie Temple-Newhook, Simon Trepel, John VanderMeulen, and Ashley Vandermorris.

Fig. 1. Gender distress and gender positivity

