



Gender-affirming care for youth—separating evidence from controversy

Correction: This article has been revised. The author provided a new citation from Turban²² postpublication, which provides a chronological summary of the research on gender-affirming medical care and mental health outcomes. The author apologizes for the oversight; the Turban article was used as part of the search to identify relevant primary literature. (March 2023)

A summary of available evidence in favor of providing gender-affirming care. Part 1 looks at the evidence for our current model of gender-affirming care, and Part 2 covers specific interventions and outcomes.

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Part 1: Gender-affirming care: Model and evidence

Understanding the needs of transgender and gender-nonconforming (TGNC) youth begins with an understanding of transgender identities. *Transgender* describes a multitude of ways of living, expressing, and experiencing one's gender outside of the binary Eurocentric model of "man" and "woman." While a history of transgender youth is beyond the scope of this article, it is important to note that within medicine there is a long-standing history of using colonial and racialized ideas that privilege normative

forms of gender to pathologize TGNC youth, leading to harmful interventions, including conversion therapy.¹

Transition for TGNC youth and adults is often considered in three domains: medical, social, and legal. Medical care in BC is delivered according to the World Professional Association for Transgender Health (WPATH) *Standards of Care Version 7* (SOC 7). *Standards of Care Version 8* is being developed using an evidence-based approach and is set to be released this year.² This is in contrast to the SOC 7, published in 2012, which was "based on the best available science and expert professional consensus."³

When discussing evidence for the SOC 7 in her Letter to the Editor,⁴ Dr Joanne Sinai referenced a systematic review by Dahlen and colleagues⁵ evaluating the quality of evidence of clinical practice guidelines for the care of

TGNC people. The quote she included from this review was not a critique of the quality of the SOC 7 as her letter implies, but a comment that it may not have been intended as a clinical practice guideline as defined in the review and thus was difficult to analyze as per their protocol. The review concluded that "WPATH SOCv7 is due for updating and this study should be used positively to accelerate improvement."⁵

Since the development of the SOC 7, there have been 16 quantitative studies^{6–21} published to date about TGNC youth care and outcomes, summarized by Turban,²² which, taken together, include thousands of participants. Early studies in 2011–2014 were often criticized due to small sample size and high risk of bias, though as the literature has expanded, so too has the strength of the evidence. These studies have shown statistically significant associations

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between gender-affirming care and increased general functioning^{6,7} and well-being,⁹ as well as decreased body dissatisfaction,^{14,15} anxiety,^{10,11,14,17} depression,^{6,10,11,13,14,17,19,21} and suicidality.^{9,10,15,19–21} A Canadian perspective is highlighted in the works of Pullen Sansfaçon and colleagues,²³ with youth reporting an improvement in well-being, mental health, happiness, and school functioning since accessing gender-affirming care. Furthermore, adults who accessed gender-affirming care in adolescence have been found to have significantly lower rates of depression and suicidality than those who did not access it until adulthood.²⁰ No randomized controlled trials have been performed to date as the current evidence indicates a risk of adverse mental health outcomes when gender-affirming care is denied, and thus randomizing youth into a control group would go against the ethical principle of equipoise.²²

When considering gender-affirming care, it is important to note that the SOC 7 advises a thorough assessment of a youth's gender identity, developmental history, supports, and comorbid mental health. Dr Sinai cited a *Washington Post* article²⁴ by psychologists Drs Laura Edwards-Leeper and Erica Anderson who expressed concern that youth are receiving gender-affirming medical interventions without adequate assessment or provision of informed consent. They raise concerns that medical providers are “affirming” patients by prescribing puberty blockers or hormones as a panacea for all mental health issues. In their recent Letter to the Editor,²⁵ Drs Sinai and Leonora Regenstreif further state that affirming care excludes treatment of underlying psychiatric conditions. This is not the approach advocated by the SOC 7 or in BC's gender-affirming care model, with the SOC 7 explicitly stating, “before any physical interventions are considered for adolescents, extensive exploration of psychological, family, and social issues should be undertaken.”³ The SOC 7 requires that co-existing medical, psychological, or social problems are addressed and stabilized prior to accessing medical interventions. Affirmation is not a one-size-fits-all model, and all interventions should be carefully considered in the context of a youth's physical, psychological, and social milieu as advocated for in our current treatment guidelines.

Part 2: Gender-affirming care: Interventions and outcomes

The outcomes of gender-affirming medical interventions are not determined solely by the physiologic effects of treatments but are also influenced by a youth's developmental stage and social milieu, including parental support. Multiple studies indicate that parental support is one of the most significant protective factors for TGNC youth,^{26–29} with qualitative studies

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showing that emotional support such as parental acceptance of identity and instrumental support such as access to medical, social, and legal interventions for affirmation are particularly important.^{30,31} Drs Sinai and Regenstreif write, “If parents who support their child's gender dysphoria but question medicalization are deemed ‘unsupportive,’ distressed youth can become alienated from their families.”²⁵ I am unsure as to what support of a child's dysphoria would entail; however, qualitative studies highlight that if parental support lacks acceptance of a child's identity, this may lead youth to distance themselves from parents and contribute to alienation.³⁰

Drs Sinai and Regenstreif's letter cites statistics regarding desistance. In doing so, however, they fail to differentiate between children and adolescents. This is of crucial importance as medical interventions are not offered prior to the onset of puberty. Studies of gender-diverse children have shown that the majority will “desist” and will identify as cisgender in adulthood,³² though the methodology and relevancy of these studies has been questioned.^{33,34} This

research is taken into account in the SOC 7, which suggests that children can further explore their identity through social transition and that psychotherapy may be used to target a reduction in distress and dysphoria. Ages 10–13 are considered a key time for consolidation of gender identity.³⁵ After this, only 1.9% to 3.5% of youth receiving gender-affirming medications at specialized gender clinics discontinue treatment.³⁶ Furthermore, studies have found that adults who stop treatment often do so for reasons related to social discrimination and not a change in identity and that, for those reporting a change in identity, some do not express regret for their earlier transition.^{37–39} Though Drs Sinai and Regenstreif discuss “increasing numbers of detransitioners,” the citation they provided is a study by Littman⁴⁰ that surveyed patients who detransitioned to assess reasons for this decision. This study did not measure numbers, rates, or prevalence of detransition.

Gender-affirming medical care for adolescents includes fully reversible interventions such as puberty blockers, partially reversible interventions including hormone therapy, and irreversible surgical interventions. The main adverse effects of puberty blocking medications are decreased bone mineral density and decreased growth velocity.⁴¹ Though their safety and efficacy have been well established in the treatment of precocious puberty, the long-term effect in treatment of gender dysphoria remains an area of active study, including possible effects on future fertility. As these medications do impact gonadal growth, their use may impact bottom surgery outcomes in the future for patients desiring vaginoplasty. This risk is listed on the Trans Care BC website for puberty blockers⁴² and should be included in informed consent discussions, though alternative surgical techniques using intestinal tissue may have similar outcomes.⁴³ Drs Sinai and Regenstreif state that “these treatments are known to cause permanent damage to sex organs and future sexual and reproductive capacity.”²⁵ They do not provide a citation to support this, and the only source I could identify for this claim was an opinion expressed by Dr Marci Bowers, which Dr Sinai mentioned in her first letter.⁴⁴ Conversely, early studies have shown improved sexual functioning and ability to achieve orgasm

after both hormonal⁴⁵ and surgical^{46,47} interventions, though this is an area of ongoing research.

Dr Sinai referred to “gender exploratory therapy” as an alternative to affirmation. I was unable to find any definition of what “gender exploratory therapy” entails, or any evidence that this approach benefits TGNC youth.

Dr Sinai also expressed concern that therapists may be dissuaded from treating people with gender dysphoria, as “gender exploratory therapy” may be misconstrued as conversion therapy. Bill C-4, an Act to amend the Criminal Code to prohibit conversion therapy, defined conversion therapy as “a practice, treatment or service designed to: change a person’s sexual orientation to heterosexual; change a person’s gender identity to cisgender; change a person’s gender expression so that it conforms to the sex assigned to the person at birth; repress or reduce non-heterosexual attraction or sexual behaviour; repress a person’s non-cisgender identity; or repress or reduce a person’s gender expression that does not conform to the sex assigned to the person at birth.”⁴⁸ It also explicitly states that “conversion therapy does not include a practice, treatment or service that relates to the exploration or development of an integrated personal identity—such as a practice, treatment or service that relates to a person’s gender transition—and that is not based on an assumption that a particular sexual orientation, gender identity or gender expression is to be preferred over another.”⁴⁸ If a therapeutic approach cannot be clearly distinguished from conversion therapy as defined in the Criminal Code, it seems doubtful that this would be a beneficial or even nonmaleficent intervention to offer our patients. ■

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must inform our public health strategies and individual practices to achieve optimal health for all. Capitalizing on the increased vaccine literacy created by the COVID-19 pandemic is an opportunity that must be seized. ■

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