BRIEFINGS ON TRANS HEALTHCARE

EVIDENCE BRIEF: PUBERTY BLOCKERS

2024

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Background

Puberty blockers are medications used to suppress the production of sex hormones, oestrogen or testosterone. This stops the irreversible development of secondary sex characteristics that are often distressing to trans young people (e.g., menstruation, breast and hip development, voice deepening, genital growth, facial hair growth, and development of masculine facial appearance and body shape). They are acceptably safe and largely reversible.[1] By delaying these physical changes, trans young people, their families, and their clinicians can take the extra time needed to determine which next steps are right for each young person, without the pressure of puberty progressing. [1]

There is a growing body of research on the effects of pubertal suppression. Puberty blocking medications have been used to safely treat precocious (early) puberty in young people for decades, before they were first utilised as a treatment option for trans and gender diverse young people.[1] Puberty blocking medications do not appear to worsen real-life cognitive functioning or educational outcomes.[2–6] Pubertal suppression is associated with stable or good mental health,[3] and broader research on the outcomes of both pubertal suppression and gender-affirming hormone therapy shows improvements in mental wellbeing.[7–12] Research has observed that pubertal suppression medications have minimal impact on bone health in adults in their late 20s.[13] All medications have some possible adverse effects (side effects); puberty blockers are considered acceptably safe, and trans and gender diverse young people and families weigh up the risks and benefits for themselves, with the help of their treating professionals, before deciding about treatment. Qualitative research which centres the voices of young people themselves has repeatedly shown the benefits of puberty suppression, which act as protective factors in bolstering the overall health and wellbeing of these young people.[3,14]

Puberty blockers cannot reverse most pubertal changes that have already occurred; therefore, they are most effective when administered in early- to mid-puberty, before significant pubertal changes. However, they may still be beneficial for some adolescents in later puberty for specific reasons (such as menstrual suppression). The World

Professional Association for Transgender Health (WPATH) Standards of Care 8 (SOC8) do not recommend a minimum age requirement for starting puberty suppression, because puberty happens at a different time for each person. Instead, it recommends "health care professionals begin pubertal hormone suppression in eligible transgender and gender diverse adolescents only after they first exhibit physical changes of puberty (Tanner stage 2)."[1(pS112)] Puberty blockers are not administered to pre-pubertal children.

The Australian Standards of Care and Treatment Guidelines for Trans and Gender Diverse Children and Adolescents (The Australian SOC) is an evidence-based guideline, written by over 40 clinical experts, in collaboration with consumers. It provides a practical framework for clinicians providing gender-affirming healthcare. The Australian SOC set out criteria for the commencement of pubertal suppression which include: a diagnosis of Gender Dysphoria in Adolescence, a medical assessment that includes fertility preservation counselling, the young person having reached Tanner stage 2 pubertal status, assent from the young person, and informed consent from their legal guardians.[15] There is no minimum age requirement; each young person is assessed individually by a multidisciplinary team, based on the individual's cognitive, emotional and physical development. [15]

Recommendations

- We recommend policy and practice continue to follow The Australian SOC.
- While we welcome continued ethical research on puberty suppression, access to puberty blockers <u>should not</u> be contingent on a young person participating in a research protocol.
- Puberty blocking medications are acceptably safe and are most effective when started at the right time; we do not recommend restricting access to them.

What does the Cass Review say?

The Cass Review states that there is insufficient/inconsistent evidence about the effects of puberty suppression, and that no conclusions can be drawn about the effect of puberty blockers on gender dysphoria, body satisfaction, or psychosocial health.[16] It casts doubt on the scientifically established effects and benefits of puberty suppression.[3] The Cass

Review misunderstands the purpose, role and effects of puberty suppression as gender-affirming care, fails to consider the benefits from the young person's point of view, utilises research in inconsistent ways, does not follow established standards for evaluating evidence quality, and inappropriately over-fixates on supposed "high-quality" evidence.[3,17,18] The Cass Review's commentaries are an outlier and inconsistent with the findings of previous well-conducted reviews and international consensus.

The Cass Review speculates, with no evidential basis, that starting pubertal suppression creates a fixed medical pathway. The Cass Review hypothesises that because the vast majority of young people who access puberty blockers go on to access gender-affirming hormones, the blockers do not allow young people "time to think" and understand the "consequences" of hormone therapy.[16] The implication from the Cass Review is that the expected outcome of having "time to think" would be for a young person to decide against starting gender-affirming hormone therapy. There is no scientific basis for these claims, rather, research suggests that pubertal suppression is commenced appropriately in trans youth who need, want and benefit from this medicine.

The Cass Review incorrectly interprets UK national data to erroneously state that there has been an "exponential rise" in referrals to gender clinics—in actuality, there was a rise in referrals in the early years of the clinics opening, before referral rates plateaued and remained steady.[3,16–18] Additionally, the Cass Review implies that gender-affirming care is rushed, careless, and common. In Australia, careful clinical consideration is made for each individual, based on that person's situation, needs and wishes, and developmental stage, after careful education and assessment by mental health and medical professionals.

In a July 2023 letter to the UK's National Health Service (NHS), Dr Cass advised that access to puberty blockers should only be granted under a research protocol in order to improve the evidence base.[16] No such study has commenced. The UK Government has since banned all access to puberty blockers for trans and gender diverse young people; but they have not been banned for cisgender young people in the treatment of precocious puberty.[19] Making access to healthcare contingent on research participation goes against

well-established medical research ethics and best-practice. People cannot make informed, *voluntary*, consent to participate in research if they are threatened or prevented from accessing medical care should they not wish to participate.[20,21] Such practice is unethical and coercive.

In response to the Cass Review

The use of puberty blockers in Australia is never routine, rather it is a considered, diligent and individualised process, with careful ongoing monitoring. To access puberty blockers in Australia, young people generally have to be referred by their GP to a specialist clinic. There is often a long waitlist for these clinics; a young person can wait up to 12 months for a first appointment. The clinicians will ask about the young person's thoughts, concerns, and wishes, and consider any other factors that are necessary to ensure the young person is fully supported (e.g., accommodations for neurodiversity, mental health support, optimisation of nutrition and physical health). Treatment decisions are collaborative with the young person, their family, and the multidisciplinary team; puberty blockers are only administered if they are wished for by the young person and deemed appropriate by the family and clinicians.[15] While on this medication, the young person continues to have regular appointments with medical and mental health clinicians to monitor physical and psychological effects. In particular, bone density is monitored, and good nutrition and weight bearing exercise are encouraged, to optimise bone health. Research indicates that low numbers of young people in Australia receive puberty blockers; over 10 years only 23% of those attending a large Victorian clinic started puberty blockers,[22] and a national survey of LGBTQ young people found a mere 4.7% of trans and gender diverse respondents had ever received puberty blockers.[23]

Qualitative research from Australia with young people and their parents helps us understand their experiences in their own words. In one key study, young people shared that they were scared to go through puberty, and that they were happy puberty blockers were able to stop them from going through the "wrong" puberty.[24] They also spoke about how puberty blockers were one beneficial part of a bigger gender-affirming process.[24]

Parents shared how relieved they were when their children began puberty blockers, noting that it gave them and their children more time to reflect on their identity and navigate the healthcare system so they could make the best possible choices as a family.[24]

Puberty suppression is not expected to fully relieve gender dysphoria or improve body satisfaction; puberty blockers pause puberty and cannot reverse all of the pubertal changes that have already occurred.[3] Puberty blockers are thus most effective when given to young people mid puberty; they prevent gender dysphoria from getting worse. Therefore, the benefits of puberty blockers will be limited when given to older teenagers who have already undergone much of the pubertal process. NHS data used in the Cass Review shows that over half of patients began puberty blocking medications between the ages of 15 and 16, meaning the blockers would have only a limited effect.[16] Best practice in Australia is to facilitate access to gender-affirming care early in puberty.

The interpretation and presentation of research findings in the Cass Review has already been being widely critiqued for its inconsistencies, inaccuracies, and unjustified dismissal of important published outcomes.[3,14,15] The Cass Review's claims that there is insufficient evidence about the effects of puberty blockers undermines a growing body of rigorous international research.[3,17,18] It judges gender-affirming healthcare by a higher standard than other areas of paediatric and adult medicine.[3,25]

The Cass Review advocates for the restriction of access to blockers to only those who consent to participate in a research protocol, although no such study has commenced. While we certainly advocate for further well-conducted longitudinal research studies on the effects of pubertal suppression, we are deeply concerned by these recommendations. They will damage the community trust and relationships that are required to conduct good quality research. As noted above, research where the receipt of healthcare is contingent on research participation is coercive and highly unethical. This would perpetuate the history of unethical, oftentimes harmful, research that has been done to—rather than with—trans communities.[26–31] Furthermore, trans communities already struggle to build trusting relationships with healthcare providers.[14,32–35] Access to

healthcare is a human right. Making it contingent on research participation will make it difficult for clinicians and patients to build the trust and rapport with each other that is so vital in the provision of this healthcare.

The Australian Research Consortium for Trans Youth and Children (ARCYTC) have been funded by the Medical Research Future Fund (#2032119) to collate the data from over 2,880 young people from gender clinics in Australia. This data set, which will be the largest in the world, will be used to continue to investigate the physical and mental health impacts of puberty suppression.

Conclusion

- Best-practice use of puberty suppression in Australia is rational, based on the expected physical effects of these medications, and is reserved for patients who are reasonably expected to benefit from it. This is different to the reported protocol and practices in the English NHS clinic.
- There is an increasing body of scientific evidence reporting stabilisation and improvement in the mental health of trans youth who are able to access pubertal suppression. Fertility returns if puberty blockers are ceased.
- Puberty suppression is often one step in a gender-affirming care pathway involving later gender-affirming hormone treatment. Each step of treatment is a separate decision.
- Pubertal suppression is provided in Australia after comprehensive physical and mental health assessments by trained specialists at a time that is right for the young person. Young people and their parents or carers must all consent to a young person starting pubertal suppression medications. This is informed consent, and includes discussions regarding expected benefits, impacts on fertility, potential risks, unknowns, information about future treatment options, and the need for ongoing medical and mental health support, to allow a considered decision to be made.
- Further long-term research is important, and we continue to undertake high-quality research in Australia, which must always involve trans and gender diverse community and researchers at every step. However, we strongly oppose the restriction of puberty suppression or other gender-affirming medical treatment to research-only settings.

Intended use of information

While we make every effort to make sure the information in this resource is accurate and informative, the information does not take the place of professional medical advice.

Do not use our information as a substitute for the advice of a health professional.

If you are an individual seeking medical or health information for yourself or for someone else, you should obtain advice relevant to your particular circumstances from a health professional.

More information and support

For clinicians, please contact AusPATH for resources and support. www.auspath.org.au

For families and young people, please contact Transcend Australia for resources and support. www.transcend.org.au

This resource and associated evidence briefs and fact sheets can be downloaded from www.transcend.org.au/resources/evidence

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