

Request for a Parliamentary Inquiry into the Social and Medical Transitioning of Children with Gender Dysphoria

Dr John Whitehall MB BS, BA, DCH, MPH and TM, MRCP (UK), FRACP.

Professor of Paediatrics and Child Health

4 September 2019
The Honourable Greg Hunt MP
Minister for Health
Parliament House
Canberra

Dear Minister Hunt,

I write to thank you for your concern about the rapidly increasing number of Australian children reported to be suffering from gender dysphoria and to express my concern at the lack of a scientific basis for the medical pathway of treatment of childhood gender dysphoria.

I am aware you have delegated a request for consideration to the Royal Australasian College of Physicians (RACP), to which I belong, and there are benefits in that acknowledgement of the need for investigation. However, the RACP is ill fitted, in my opinion, for such an investigation. It is, after all, an organisation primarily dedicated to the education of physicians. Interpretation of ethical issues that transcend the activities of physicians and involve participatory social workers, psychologists, psychiatrists and surgeons are beyond its purview.

The issue really belongs to Ministries of Health and governance bodies of children's hospitals. After all, the latter provided ethical clearance for the procedures, and continue to support the practice with administrative staff, building space and the salaries of the participants. Important child safety and protection issues are raised that are matters for the federal government. The first role of government is the protection of vulnerable children.

I respectfully propose that a Parliamentary Inquiry would be the best forum for the proper consideration of a social phenomenon that has emerged with such speed and caused such consternation. It seems that public policy and medical 'best practice' is being declared in haste without a sufficient foundation of fact and reflection, and a formal Parliamentary Inquiry could provide that foundation.

I fully appreciate the sensitivity of the matter. I am aware of the pain and suffering of patients, and the commitment of staff of children's hospitals to the 'best interests' of children. I have no criticism of the commitment of staff in children's gender clinics.

After considering the two concerns of the rapid rise of childhood gender dysphoria in Australia and the lack of scientific basis for current medical treatment, I will propose some Terms of Reference for a potential Parliamentary Inquiry. I thank you for receiving this respectful submission.

Should you wish further clarification of points raised in this letter, may I refer you to the several articles I have written on the subject in *Quadrant* magazine and to my chapter in the book *Transgender One Shade of Grey* (2018), which has an extensive list of references.

THE RAPID ESCALATION OF CHILDHOOD GENDER DYSPHORIA

1. THE RISING NUMBERS IN AUSTRALIA

I look back to the experience of Dr Robert Kosky when he was Director of Psychiatric Services at the Perth Princess Margaret Hospital for Children and W.A. State Director of Child and Adolescent Psychiatry Services, and reported his experience of only 8 gender-confused children in the five years from 1979 to 1984^[i]. Now almost 2-3 children are being presented to the Perth children's hospital every week.

I refer to my own discussions in 2016 with 28 of my paediatric colleagues in Australia with 931 cumulative years of practice, and from which only 12 cases could be recalled: 10 with associated mental disorder and 2 victims of prolonged sexual abuse. Indeed, when I was in general paediatrics, at the forefront of child abuse in Western Sydney, for a child to attest to be of the opposite sex was taken to be suggestive of abuse. Nevertheless, in my excess of 50 years practice in paediatrics, no child was ever brought to me with concerns of confusion in gender identity. Nor was confusion over gender ever raised by a parent or carer in intimate discussions of sexual behaviours of their children.

Now, the numbers of children being brought to children's hospitals with gender confusion are increasing markedly. For example, at the Royal Children's Hospital, Melbourne, referrals for gender dysphoria have increased from around one child every two years in 2003 to 104 children in 2014^[ii] and 253 children in 2017.^[iii] Across Australia, a total of 2415 children and adolescents may currently be undergoing therapy. To permit perspective, about 960 children and adolescents develop cancer each year in Australia.^[iv]

In current experience, gender confusion is more prevalent in young adolescent natal girls when it has a rapid onset, appears infectious, and associated with social media.^[v] For example, I recently learned of an outbreak in a high school in Western Sydney in which several girls in the same year 'suddenly' evinced concerns over their gender identity.

In the UK, it is reported that the 'explosion in the number of children wanting to change sex has prompted an inquiry by ministers' with Penny Mordaunt, the Minister for Women and Equalities, declaring she wanted 'to understand the reasons behind a 4,400 per cent increase in girls being referred for transitioning treatment in the past decade'. The Minister is reported to have declared 'officials will look into the role of social media and the teaching of transgender issues in schools as part of their inquiries'.^[vi]

Given there are no plausible biological causes for what can be described as an epidemic, it is appropriate for health authorities to investigate the problem.

Recommendation 1

The federal Minister for Health is requested to quantitate the escalation of childhood gender dysphoria in Australia, and consider to what extent it has a plausible biological cause or appears to follow a pattern of ‘social contagion’.

2. THE ROLE OF STATE LAW AND SCHOOL CURRICULA IN ESCALATING THE NUMBERS

The state education departments of NSW, Victoria, Queensland and South Australia claim that they are compelled to support children (minors) socially and medically transitioning because of federal, state and territory laws ^{[viii].[viii]}.

This can be a challenge to the conscience of principals and staff. They are being asked to participate in an experimental procedure that will lead to irretrievable intervention in a child while it is widely publicised that most affected children would revert to natal gender without medical intervention.

Social affirmation of a child or adolescent’s identification with the opposite sex is dangerous because it is likely to be the first step in a pathway of medical escalation that progresses to hormonal therapy and possibly surgery, under a life-time of medical care. Avoidance of a life time of medical care is usually considered to be a priority.

Given that gender-confused children are likely to be suffering from co-incidental mental disorders including autism, depression and anxiety (as discussed below) they will be especially vulnerable to the focused attention of authority figures, rendering them all the more susceptible to the enthusiasm of adults for their change in gender identity.

Are these vulnerable children capable of mustering the strength to deny the influence of the authority figures, such as schoolteachers, and to declare ‘No, I realise I really am a boy/girl’? Given their vulnerability, it is not surprising that most children who have been socially affirmed progress to the next step on the medical pathway, which will usually be the administration of hormones to ‘block’ the development of puberty soon after its appearance. The youngest child to receive puberty blockers in Australia has been a natal boy age 10½, according to records of the Family Court.

It is appropriate for the health authorities to investigate to what extent our laws and education department policies contribute to the present unprecedented outbreak of childhood gender dysphoria.

Recommendation 2

The Minister is requested to review:

i) To what extent Federal, State and Territory laws require school and other authorities to affirm and facilitate the social transition of a child whose claimed gender identity is different to their biological sex;

ii) To what extent the escalation in gender dysphoria correlates with the introduction of teaching material into Australian schools that promotes the notion of ‘gender fluidity’.

LACK OF SCIENTIFIC BASIS FOR THE MEDICAL PATHWAY

3. ABANDONING THE ‘WATCHFUL WAITING’ MODEL

It is widely reported that most children with gender dysphoria will orientate to natal gender through puberty.^[ix]

The question to the Minister is thus, ‘*Why are children now rushed into a pathway of medicalisation when it has been proven that a supportive “wait and see” approach will usually suffice?*’

A review by Ristori and Steensma summarises the research evidence:^[x]

Distinguished Professor of Psychiatry at Johns Hopkins University, Paul McHugh, observes, ‘When children who reported transgender feelings were tracked without medical or surgical treatment at both Vanderbilt University and London’s Portman Clinic, 70%-80% of them spontaneously lost those feelings.’^[xi]

In a Special Review in the *Journal of Homosexuality* concerning ‘The treatment of gender dysphoric/gender variant children and adolescents’ David Schwartz (2012),^[xii] a child psychiatrist from New York, emphasised the lack of scientific data regarding medical intervention and concluded with the reassurance that many affected children would naturally desist. He declared

the long term psychological and physiological consequences of ... (the medical pathway) ... are unknown and, as is the case with all self-selected populations, very difficult to assess owing to problems of (lack of experimental) control and limited sample numbers.

Schwartz highlighted concerns, including dependence on ‘clinical impression’, ‘usage of anecdotal data’, suspension of ‘natural scepticism’ in ‘favor of literality’ of children’s and adolescents’ claims, unquestioning ‘certitude’, and lack of consideration of ‘potential disadvantages’.

I, personally, have heard the sad refrain from a number of parents that their confused children were submitted to a brief questionnaire followed by a short consultation, after which the

diagnosis of ‘being born in the wrong body’ was made. The parents were then advised to ‘say goodbye to their former son/daughter and welcome their new daughter/son’. Almost universally, attempts at consolation for the parents were based on the argument ‘it is better to have a live daughter/son than a dead son/daughter’. Almost universally, counselling was then offered: to the parent to accept the new reality, not for the child to resolve their confusion.

Recommendation 3

The Minister is requested to consider the central critique of the Medical Pathway, namely, ‘Why are children now rushed into a pathway of medicalisation when it has been proven that most children with gender dysphoria will orientate to natal gender through puberty and therefore a supportive ‘wait and see’ approach, with under-pinning psychotherapy, will usually suffice?’

4. ABANDONING THE ESTABLISHED PSYCHOLOGICAL AND FAMILY THERAPY MODEL

Vulnerable children with a symptom of gender confusion should not be denied the benefits of extensive support from traditional psychological, psychiatric and family therapy. It should not be forgotten that such therapy is known to have been effective in the past for children with disordered appreciation of their gender identity^{[xiii], [xiv], [xv], [xvi], [xvii], [xviii]}.

The relationship between gender confusion and co-incidental mental disorder has long been recognised.^{[xix], [xx], [xxi], [xxii], [xxiii]} Proponents of medicalisation declare the dysphoria may *cause* the mental disorder, but there are confirmations of dysphoria presenting *after* the onset of mental disorder, as part of its manifestations.^[xxiv] Autistic spectrum disorder, presenting in early childhood, is known to be associated with later gender dysphoria, perhaps related to the development of a fixation of ideas.^[xxv]

It is thus recognised that children expressing confusion over their gender are vulnerable children, suffering broadly, who deserve a considered approach to diagnosis and treatment. One symptom should not predominate but be seen to represent an underlying complexity. To give a medical analogy, just because children with pneumonia may vomit, their illness should not be ascribed to infection of the intestines rather than the lungs.

As well as the association with mental illness, the relationship between gender confusion and disturbed family dynamics has long been recognised. Review of proceedings of the Family Court of Australia in which medical authorities were seeking authority to enter the child onto the medical pathway reveal the prevalence of family disruption. Such disruption is known to affect the mental health of involved children.

In the era of the 1970’s to 80’s, most gender confusion, as reported by Robert Kosky, concerned young males who were found to be in a pathological relationship of symbiosis with their mothers. Typically, the single mother had been abandoned by an adult male, and

persuaded in her mind to feel more comfortable with the boy the more he took on a female persona. Others have pointed to a higher than expected prevalence of psychological problems of mothers. [\[xxvi\]](#).[\[xxvii\]](#).[\[xxviii\]](#) In Kosky's experience, when separated from the mother, the child reverted to natal identity. However, reversion to natal identity in the child was often associated with precipitation of psychological disturbance in the mother. This reaction in the mother suggests a kind of Munchausen phenomenon by proxy, in which psychological needs in one person are assuaged by the evocation of symptoms in another. There are reports of increasing frequency of parents urging authorities to enter their young children onto the medical pathway of transition. Kosky's experience remains relevant.

In all of these cases, there is a need for traditional, extensive psychiatric exploration of mental disorders in the child and family, and the provision of traditional support including psycho-pharmacotherapy.

Recommendation 4

The Minister is requested to investigate:

i) the conceptual basis of, and evidence for, traditional psychological, psychiatric and family therapy in childhood gender dysphoria.

ii) the extent of psychological, psychiatric and family therapy which has been made available to children and adolescents in Australia who are now on the Medical Pathway of treatment for gender dysphoria.

5. FAILURE TO DIAGNOSE PSYCHOLOGICAL CAUSES OF GENDER DYSPHORIA.

The Minister is referred to the unfortunate case of *Finch vs Southern Health* in which a young man who underwent sex-change surgery at the Monash Medical Centre subsequently alleged an underlying psychological condition had not been diagnosed by the hospital, and that he had been inappropriately treated. [\[xxix\]](#)

Fairfax papers reported, 'Australia's only sex-change clinic has been temporarily shut down and its controversial director forced to quit amid growing claims that patients with psychiatric problems have been wrongly diagnosed as transsexuals and encouraged to have radical gender reassignment surgery.' [\[xxx\]](#)

Further, '*The Sunday Age* has been told at least eight former patients of the Gender Dysphoria Clinic at Melbourne's Monash Medical Centre believe they may have been misdiagnosed. Some have tried to commit suicide while struggling to live as the opposite sex after the irreversible operations'.

Major psychiatric conditions coexist with and often predate gender dysphoria in children. At the first presentation to a US gender clinic of ninety-seven children with mean age of 14.8 years, 44.3 per cent had a history of psychiatric diagnoses, 37.1 per cent were already on psychotropic medications and 21.6 per cent had a history of self-injurious behaviour.^[xxxii] Autism has been found in 7.8 per cent of transgender children in a Dutch clinic^[xxxiii] and around 13 per cent in London^[xxxiii]. In an Australian study of thirty-nine dysphoric children of mean age ten, behavioural disorders were observed in a quarter, and Asperger syndrome in one in seven.^[xxxiv]

Ideological commitment to the idea that a child can be ‘born in the wrong body’ may make clinicians less alert to relevant psychiatric conditions like autism or depression that underlie a child’s gender confusion. Failure to correctly diagnose will have lifelong consequences for a child ushered on to the Medical Pathway of puberty blockers, cross-sex-hormones and surgery.

Recommendation 5

The Minister is requested to examine the potential legal liability for health practitioners and public hospitals for damages caused by medically transitioning children who may have associated mental and other health issues underlying their dysphoria that were not diagnosed at the time of treatment.

6. TENDENTIOUS ASSERTIONS ABOUT SUICIDE RISK.

At this stage, the issue of likelihood of suicide should be addressed. There is, in fact, little evidence on the association between gender dysphoria *per se* and childhood suicide.^[xxxv] Self-harm is reported in many children and adolescents^{[xxxvi],[xxxvii]} including the cohort with gender dysphoria. A large UK study wondered if the numbers threatening self-harm in their cohort of dysphoric children ‘simply reflect trends in the general population’^[xxxviii]. An article in the *Journal of Homosexuality* concludes ‘very few suicide decedents (sic)’ have been identified as having ‘minority sexual orientation’ in studies in North America: 3 of 120 adolescent suicides in New York, and 4 of 55 in Quebec; and warns conclusions based on ‘small numbers ... must be regarded as tentative’^[xxxix].

It should, however, be emphasised that gender dysphoria is associated with co-morbid mental disorders recognised for a propensity for self-harm^[xli]. The children are, in general, at risk, and should be supported by traditional psychiatric therapy.

Gender dysphoric children are also at risk because of their associated high rate of family disorder, whose stresses are known to affect all children^[xlii].

It should also be noted that a child or adolescent answering ‘Yes’ to a question as to whether they ever felt like harming themselves, though of deep concern, is not necessarily an

expression of intent. The Minister should be aware of the powerful tool for manipulation that exists in an alleged threat of suicide, whether it is uttered by the confused child, or proclaimed by a medical authority.

It should, moreover, be emphasised that prevention of suicide may be more effectively implemented by helping the child become ‘comfortable’ in the skin in which it was born. The suicide rate in transgendered adults has been reported to be about 20 times higher than in the ordinary population.^{[xliii],[xliiii],[xliv]}

Recommendation 6

The Minister is requested to investigate the relationship, if any, between gender dysphoria and suicide in Australian children and adolescents, and whether the facts on this important question are being objectively presented by stakeholders.

7. PUBERTY BLOCKERS: UNSUBSTANTIATED USE AND IGNORING EVIDENCE OF HARM

Following ‘social affirmation’ of a child’s protestation that it is born in the wrong body, the next step is the introduction of ‘puberty blockers’. These are analogues of natural hormones which were developed in the 70’s and shown capable of blocking the cascade of hormones that begin deep in the brain and progress to the gonads, causing them to release testosterone and oestrogen. These sex hormones stimulate development of secondary characteristics, including cerebral sexualisation.

They were administered for pathological, early development of puberty which they blocked, and to adults suffering from diseases worsened by continued production of sex hormones, for example, prostate cancer in men and endometriosis in women.

They began to be employed in the medical treatment of childhood gender dysphoria in the 80’s, in order, allegedly, to reduce distress caused by the appearance of unwanted sex characteristics, and to give the child more time to contemplate its sexual identity and procreative future. Repeatedly, and under oath in Family Court of Australia proceedings, proponents declared their effects to be ‘safe and entirely reversible’.

However, research on sheep has proven the above claim to be wrong. Researchers in universities in Glasgow and Oslo have shown that the administration of blockers has resulted in demonstrative effects on the limbic system of sheep. On blockers, that important part of the brain has hypertrophied (enlarged), and actions of many of its genes have been disrupted. As a result, the cognitive performance of the sheep has been reduced, and its emotional lability increased^{[xlv],[xlvi],[xlvii],[xlviii],[xlix],[li],[lii]}.

Studies on executive function of adult humans on blockers have found an associated reduction in cognitive and psychological performance though confounders such as age,

pathology and treatment could not be discounted^{[lii],[liii],[liv],[lv]}. Furthermore, research on intestinal disorders in women receiving blockers to reduce the effect of oestrogen in endometriosis, reveals an association with a marked reduction of the number of intestinal neurons^[lvi], raising the possibility of a widespread role for the hormone specifically blocked in the brain^{[lvii],[lviii]}.

Therefore, the claim of safety for the use of blockers in children is not substantiated by international research. It should not be overlooked that puberty is associated with a great development of cerebral anatomy, from organisation, to myelination, to apoptosis. Administration of any drug shown to affect neuronal tissue should be undertaken only with rigorous scientific basis.

The Minister is pointed to the conclusions of the *Rogers vs Whittaker* legal case^[lix], which confirmed an obligation by a medical practitioner to reveal even a one in ten thousand possibility of a material side effect of therapy. Given public hospitals are involved in the administration of a drug with undisclosed but proven side effects as revealed in studies on laboratory animals, and strongly suggested by effects in humans, who will be responsible for compensation when these already vulnerable children claim handicaps to be the result of un-informed treatment?

Recommendation 7

The Minister is requested to investigate:

i) whether research is being ignored and puberty blockers administered to children without scientific substantiation;

ii) whether the unsubstantiated use of puberty blockers amounts to experimentation on children.

8. PUBERTY BLOCKERS AND THE CLAIM OF 'CONTEMPLATING' GENDER IDENTITY

It is claimed that the administration of puberty blockers to children at the first stage of puberty (which may be as early as 9- 10 years of age), will permit time for 'contemplation' of gender/sexual identity and procreative future, but there are indications that the primary hormone blocked plays a central role in sexualisation, as well as a secondary role in stimulating the production of the sex hormones, testosterone and oestrogen, from the testes and ovaries.

The blocked hormone certainly plays a role in the limbic system in the brain, which integrates memory, emotions, and cognition into executive function. That is, the limbic system coordinates the internal 'world view' of the brain into 'external' expression of ambitions, identities and decisions.

That the blocked hormone has an even more widespread role in the brain is suggested by the presence of its special receptors in the cerebrum and spinal cord^[lx]. It has been also shown to be associated with a ‘sex centre’ in the midbrain which was identified in the 1970’s. If the blocked hormone is injected into that part of the midbrain of an immature animal, it provokes precocious sexualised behaviour: young female animals prepare for mounting and males to oblige^{[lxi],[lxii],[lxiii],[lxiv],[lxv]}. This sexualising effect is blocked by puberty blockers^[lxvi].

The sexualising effect of the brain was already initiated several weeks after conception through the effect of a gene on the Y chromosome, which not only stimulated the formation of male genitalia from undifferentiated genital tissue, but also generated a male-specific anatomy of the brain. This cerebral effect seems to be further activated in puberty through the added influence of the sex hormones, testosterone and oestrogen, as part of their overall effect on male/female characterisation^{[lxvii],[lxviii],[lxix],[lxx]}.

A great deal is unknown about the genetic and hormonal bases of sexual maturation, but sufficient is known to question the validity of the claim that blockers permit time to contemplate sexual identity and procreative future. How can that future be contemplated appropriately in a child whose sexualising influences have been neutered by drugs? How can a child be expected to develop a ‘world view’ including identity when its limbic system has been affected? How can proponents of the use of puberty blockers in gender dysphoria claim so confidently their effects are ‘safe and entirely reversible’ when their administration for 28 months to an 11 year old boy revealed interruption to the normal masculinization of white matter, associated with ‘a decrease in...overall intellectual performance after the onset of pubertal block’^[lxxi].

Recommendation 8

The Minister is requested to investigate the claim that blocking of puberty will permit appropriate ‘contemplation of gender identity’ in vulnerable children.

9. EXPERIMENTING WITH CROSS-SEX HORMONES CONTRARY TO GUIDELINES

Given the pressures of social affirmation and then the neutering effect of blockers, it is not surprising reports claim most children on blockers progress to the next stage: the administration of cross-sex hormones to stimulate the desired external appearance.

International guidelines suggest cross-sex hormones not be given to adolescents under the age of 16. The Guidelines of Melbourne’s Royal Children’s Hospital have no age limit.

The research by Hulshoff Pol et al reveals a rate of shrinkage of the adult male brain on oestrogens that is 10 times greater than that of ageing, after only four months of treatment^[lxxii]. Others have also demonstrated anatomical changes on adult brains^{[lxxiii],[lxxiv]}.

There are no reports available on the effect of cross-sex hormones on the developing brains of children and adolescents. However, the Minister should be aware that opposite-sex hormones had a demonstrable effect on adult brains after only 4 months of treatment. Children are likely to be receiving them for life and throughout the period of great brain maturation, which normally extends from puberty to early adulthood.

I could find no reference to the cerebral effects of cross sex hormones in any proclaimed Guidelines for management of gender dysphoria, or in any of the relevant Family Court proceedings. Metabolic effects are described in detail, but reported effects on the brain are ignored.

Recommendation 9

The Minister is requested to investigate whether cross-sex hormones are being given to children and adolescents contrary to international guidelines, or given without full explanation of possible harmful effects.

10. FAILURE TO EXPLAIN IRREVERSIBLE HARM OF MEDICAL AND SURGICAL THERAPY

Administration of cross-sex hormones has a suppressing effect on the natural gonads. Just how long it takes for the suppression to become permanent is unknown, but chemical castration is the end result. Proponents of childhood transgendering confirm this by suggesting eggs of females and biopsies of testicles might be taken before undertaking cross-sex hormones in order to procure artificial conceptions in the future.

The Australian Standards of Care and Treatment Guidelines for trans and gender diverse children and adolescents, promulgated by the Royal Children's Hospital in Melbourne state at pg.14,

For trans males, treatment with testosterone does not necessarily cause infertility ... However, the degree to which testosterone may reduce one's reproductive potential when taken in adolescence and early adulthood is unknown ... For trans females, there is evidence that oestrogen impairs sperm production, although whether these effects are permanent remain unknown.

Such an assertion is contentious. It is appropriate for the Minister to enquire as to whether the advice given under guidelines promulgated in Australia convey to adolescents a correct understanding of the likely irreversible loss of their fertility.

With surgery the next step in the medical programme of transgendering therapy, international advice is that irreversible therapy should not be undertaken under the age of 18 years but, already in Australia, at least five natal girls have had bilateral mastectomies under that age. Two were aged fifteen, one sixteen and two seventeen.

Proponents of transitioning argue the mastectomies are justified by the claim they are ‘reversible’. By this they imply the breast is merely a cosmetic structure whose shape may be restored by implantation of silicon sacs, as if breast feeding was irrelevant.

Recommendation 10:

The Minister is requested to investigate contentious advice given about the reversibility of infertility due to cross-sex hormones and the claim that bilateral mastectomies are ‘reversible’ by using by silicon sac implants.

11. SUMMARY OF CONCERNS ABOUT THE HARMS AND UNSUBSTANTIATED BASIS OF MEDICAL TREATMENT FOR CHILDHOOD GENDER DYSPHORIA

Lest it be concluded I am a lone physician emphasising the lack of scientific bases for declarations of the experimental nature of medical intervention in childhood gender dysphoria, I refer to publications in mainstream paediatric literature that complain of ‘lack of consensus regarding appropriate intervention or even appropriate goals of intervention’^[lxxv], ‘limited long term data’^[lxxvi] small numbers from only one clinic’^[lxxvii], ‘reliance on clinical impressions’^[lxxviii].

I refer also to an article published in a recent, prestigious journal, Paediatrics, by clinicians at the Royal Children’s Hospital in Melbourne: a hospital noted for its leadership in promotion of the medical pathway for dysphoria.

The authors conducted a literature search on hormonal treatment of young people from 1946 to 2017, finding only 13 publications of relevance. They declared this scarcity was ‘problematic’, concluding the studies ‘neglected several key outcomes’ including ‘psychological symptoms’, the impact on fertility, the possibility of side effects on growth and cardiovascular function, and the manner of withdrawal from treatment, especially with regret^[lxxix]. The Melbourne authors reported a ‘medium’ risk of bias in all the studies, no significant effect of blockers on the symptoms of gender dysphoria in any study, but a statistically non-significant increase in gender dysphoria and body image difficulties in one.^[lxxx]

Thus, there is a lack of randomised controlled studies that provide definitive recommendations for treatment options. Therefore, according to another author, the best evidence available is characterised as ‘expert opinion’, which is influenced by prevailing cultural belief systems and theoretical orientations.^[lxxxi]

A review of recent research by Fuss et. al. (2015) concluded that

more longitudinal research ... is needed to compare different strategies of care and to see long term results especially in those minors with co-morbid psychiatric disorders. The lack of

evidence is even more pressing considering ... the dramatically increasing number of referrals to gender clinics ... [lxxxvii](#).

It is my view that lack of evidence for effect and denial of side effects renders the Medical Pathway of treatment of childhood gender dysphoria experimental.

Recommendation 11

The Minister is requested to weigh the overall evidence for benefit and for harm of the Medical Pathway for children with gender dysphoria.

CONCLUDING REMARKS

Finally, I address my requests to the Federal and State Ministers for Health, and to governance of Children's Hospitals because I am aware of no national precedent for such widespread unsubstantiated medical practice.

In my opinion an ideology, gender fluidity, has been imposed on a section of the medical and broader community with the force of law. Such experimental practice confronts all the international codes of medical research ethics on human experimentation including, the ancient Hippocratic Oath, the Belmont Report (1978), the Declaration of Geneva (1948), the Declaration of Helsinki (1964) and the Nuremberg Principles (1949).

Therefore, I ask the Minister to put the following suggested terms of reference to a federal parliamentary inquiry.

Suggested Terms of Reference

Parliamentary Select Committee Inquiry into the Social and Medical Transitioning of Children with Gender Dysphoria

1. To quantitate the escalation of childhood gender dysphoria in Australia, and consider to what extent it has a plausible biological cause or appears to follow a pattern of 'social contagion'.

2. To assess:

i) to what extent, if any, Federal, State and Territory laws require school and other authorities to affirm and facilitate the social transition of a child whose claimed gender identity is different to their biological sex;

ii) to what extent, if any, the escalation in gender dysphoria correlates with the introduction of teaching material into Australian schools that promotes the notion of ‘gender fluidity’.

3. To consider the central objection to the Medical Pathway:

‘Why are children now rushed into a pathway of medicalisation when it has been proven that most children with gender dysphoria will orientate to natal gender through puberty, and therefore a supportive ‘wait and see’ approach, with under-pinning psychotherapy, will usually suffice?’

4. To investigate:

i) the conceptual basis of, and evidence for, traditional psychological, psychiatric and family therapy in childhood gender dysphoria

ii) the extent of psychological, psychiatric and family therapy which has been made available to children in Australia who are now on the Medical Pathway of treatment for gender dysphoria.

5. To examine the potential legal liability for health practitioners and public hospitals for damages caused by medically transitioning children who may have associated mental and other health issues underlying their dysphoria that were not diagnosed at the time of treatment.

6. To examine the relationship, if any, between gender dysphoria and suicide in Australian children, and whether the facts on this important question are being objectively presented by stakeholders.

7. To investigate:

i) whether research is being ignored and puberty blockers administered to children without scientific substantiation;

ii) whether the unsubstantiated use of puberty blockers on children amounts to experimentation.

8. To investigate the claim that blocking of puberty will permit appropriate ‘contemplation of gender identity’ in children.

9. To investigate whether cross-sex hormones are being given to children in Australia contrary to international guidelines, or given without full explanation of possible harmful effects.

10. To investigate contentious advice given about the reversibility of infertility due to cross-sex hormones and the claim that bilateral mastectomies are ‘reversible’ by using by silicon sac implants.

11. To weigh the overall evidence for benefit and for harm of the Medical Pathway for children with gender dysphoria.

References

- [i] [Kosky RJ Gender-disordered children: does inpatient treatment help? MJA.1987;146; June 1:565-569.](#)
- [ii] M. Telfer, M. Tollit, & D. Feldman, 'Transformation of Health-care and Legal Systems for the Transgender Population: The need for Change' (2015) 51 *Journal of Paediatrics and Child Health* 1051.
- [iii] 'Childhood demand for gender transition treatment surges to record high', *ABC News*. 4 October, 2018, <https://www.abc.net.au/news/2018-09-20/childhood-demand-for-biological-sex-change-surges-to-record/10240480>
- [iv] Childhood cancer. The facts. <https://ccia.org.au/home/our-purpose/childhood-cancer-information/>
- [v] Littman L. Rapid onset gender dysphoria in adolescents and young adults: A study of parental reports. *PLoS ONE* 13(8):e0202330. <https://doi.org/10.1371/journal.pone.0202330>.
- [vi] Penny Mordaunt. <https://www.telegraph.co.uk/politics/2018/09/16/minister-orders-inquiry-4000-per-cent-rise-children-wanting/>
- [vii] 'Transgender students in schools – legal rights and responsibilities', *Legal Issues Bulletin No 55, December 2014*, Education and Communities, NSW Government. <https://education.nsw.gov.au/about-us/rights-and-accountability/media/documents/public-legal-issues-bulletins/LIB-55-Transgender-students-in-schools-legal-rights-and-responsibilities.pdf>
- 'Diversity in Queensland Schools – information for principals', Queensland Department of Education and Training, undated but current as of 30 June 2017. <http://education.qld.gov.au/schools/inclusive/docs/diversity-in-qld-schools-information-for-principals.pdf>
- 'Gender Identity', Education and Training, Victorian Government, undated but current as of 15 March 2018. <http://www.education.vic.gov.au/school/principals/spag/health/Pages/genderidentity.aspx>
- 'Transgender and intersex student support', SA Department for Education and Child Development. <https://www.decd.sa.gov.au/sites/g/files/net691/f/transgender-and-intersex-support-procedure.pdf>
- [viii] Ms Hennessy, Health Complaints Bill Second Reading. Parliament of Victoria. Hansard. Feb 10, 2016.
- [ix] Diagnostic and Statistical Manual of Mental Disorders (DSM-5), American Psychiatric Association, 2013, Op. cit., pg. 452.
- [x] J. Ristori and T. Steensma, 'Gender Dysphoria in Childhood' (2016) 28 *International Review of Psychiatry* 13 at 15.

[xi] McHugh, 'Transgender Surgery isn't the Solution,' *Wall Street Journal*, Updated 13 May 2016. <https://www.wsj.com/articles/paul-mchugh-transgender-surgery-isnt-the-solution-1402615120>

[xii] Schwartz D. 'Listening to children imagining gender: observing the inflation of an idea'. *J Homosexuality*. 2012;59(3):460-479. Doi [10.1080/00918369.2012.653314](https://doi.org/10.1080/00918369.2012.653314)

[xiii] Rekers GA, Kilgus M, Rosen A. Long term effects of treatment for gender identity disorder of childhood. *Journal of psychology and amp: Human Sexuality*. 1991;3(2):121-153.

[xiv] Pauly I. Female transsexualism: Part 2. *Archives of sexual behaviour*. 1974. 3(6):509-524

[xv] Zuger B. Effeminate behaviour present in boys from childhood: ten additional years of follow up. *Comprehensive Psychiatry*. 1978;19(4) (July-August): 363-369.

[xvi] Lothstein L, The adolescent gender dysphoric patient: an approach to treatment and management. *Journal of Pediatric Psychology*. 1980; 3(1):93-109.

[xvii] Zucker KJ, Wood H, Singh MA, Bradley SJ. A Developmental, biopsychosocial model for the treatment of children with gender identity disorder. *J Homosexual*. 2012. 59 (3): 369-397.

[xviii] Wallien MS, Swaab H, Cohen-Kettenis PT. Psychiatric comorbidity among children with gender identity disorder. *J Am Acad Child Adolesc Psychiatry*. 2007;46(10):1307-1314. Doi [10.1097/chi.0b013e3181373848](https://doi.org/10.1097/chi.0b013e3181373848)

[xix] Steensma TD, Zucker KJ, Kreukels BP et al. Behavioural and emotional problems on the Teacher's Report Form: a cross national, cross-clinic comparative analysis of gender dysphoric children and adolescents. *J Abnorm Child Psychol*. 2014;42(4):635-647. Doi: [10.1007/s10802-013-9804-2](https://doi.org/10.1007/s10802-013-9804-2)

[xx] Spack NP, Edwards-Leeper L, Feldman HA, et al. Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics*. 2012;129(3):418-425. Doi [10.1542/peds.2011-0907](https://doi.org/10.1542/peds.2011-0907)

[xxi] Becerra-Culqui TA, Liu Y, Nash R et al. Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers. *Pediatrics*. 2018;141(5). Doi [10.1542/peds.2017-3845](https://doi.org/10.1542/peds.2017-3845)

[xxii] Hewitt JK, Paul C, Kasiannan P et al. Hormone treatment of gender identity disorder in a cohort of children and adolescents. *Med J Aust*. 2012;196(9):578-581. Doi [10.5694/mja12.10222](https://doi.org/10.5694/mja12.10222)

[xxiii] Kaltiala-Heino R, Sumia M, Tyolajarvi M et al. Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. *Child Adol Psych Mental Health*. 2015.9(9). Doi: [10.1186/s13034-015-0042-y](https://doi.org/10.1186/s13034-015-0042-y)

[xxiv] De Vries AL, Noens IL, Cohen-Kettenis PT et al. Autism spectrum disorders in gender dysphoric children and adolescents. *J Autism Dev Disord*. 2010;40(8):930-936. Doi [10.1007/s10803-010-0935-9](https://doi.org/10.1007/s10803-010-0935-9)

- [xxvi] Zucker KJ. Children with gender identity disorder. Is there a best practice? *Neuropsychiatrie de l'enfance et de l'adolescence*. 2008;56(6):358-364. Doi 10.1016/j.neurenf.2008.06.003
- [xxvii] Zucker KJ, Lambert S, Bradley SJ et al. Risk factors for general behavior problems in boys with gender identity disorder. Presented at 19th Symposium of the Harry Benjamin International Gender Dysphoria Association. 2005. Bologna Italy.
- [xxviii] Marantz S, Coates S. Mothers of boys with gender identity disorder: a comparison of matched controls. *J Am Acad. Child and Adolescent Psychiatry*. 1991;30(2):310-315. Doi 10.1097/00004583-199103000-00022
- [xxix] *Finch v Southern Health & Ors* [2004] VCC 44 (12 November 2004)
- [xxx] 'Sex change clinic got it wrong,' Jill Stark, *Melbourne Age*, May 31, 2009. <https://www.theage.com.au/national/sexchange-clinic-got-it-wrong-20090530-br3u.html>
- [xxxi] Spack NP, Edwards-Leeper L, Feldman HA et al. Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics*. 2012;129 (3):418-425.
- [xxxii] De Vries AL, Noens IL, Cohen-Kettenis et al. Autism spectrum disorders in gender dysphoric children and adolescents. *J Autism Dev Dis*. 2010;40:930-936.
- [xxxiii] Holt V, Skagerberg E, Dunsford M. Young people with features of gender dysphoria: demographics and associated difficulties. *Clin Child Psychol Psychiatry*. 2016;164:108-118.
- [xxxiv] Hewitt Jk, Paul C, Kassianan P et al. Hormone treatment of gender identity disorder in a cohort of children and adolescents. *MJA*. 2012;196(9):578-581.
- [xxxv] Aitken M, VanderLaan DP, Wasserman L, Stojanovski S, Zucker KJ. Self-harm and suicidality in children referred for gender dysphoria. *J Am Acad Child Adolesc Psychiatry*. 2016;55(6):513-520. Doi [10.1016/j.jaac.2016.04.001](https://doi.org/10.1016/j.jaac.2016.04.001)
- [xxxvi] Lewinsohn PM, Rohde P, Seeley JR. Adolescent suicidal ideation and attempts: risk factors and clinical implications. *Clin Psychol Sci Pract*. 1996;3(1):25-46. Doi 10.1111/j.1468-2850.1996.tb00056.
- [xxxvii] Faulkner AH, Cranston K. Correlates of same-sex sexual behavior in a random sample of Massachusetts high school students. *Am J Public Health*. 1998 Feb;88(2):262-266. Doi 10.2105/AJPH.88.2.262
- [xxxviii] Holt V, Skagerberg E, Dunsford M. Young people with features of gender dysphoria: demographics and associated difficulties. *Clin Child Psychol Psychiatry*. 2016;21(1):108-118. Doi [10.1177/1359104514558431](https://doi.org/10.1177/1359104514558431)
- [xxxix] Haas A et al, Suicide and suicide risk in lesbian, gay, bisexual and transgender populations: review and recommendations. *J Homosex*. 2011;58 (1): 10-51. doi: 10.1080/00918369.2011.534038.

- [xli] Mayes SD, Gorman AA, Hillwig-Garcia J et al. Suicide ideation and attempts in children with autism. *Res Autism Spec Dis*. 2013;7(1):109-119. Doi [10.1016/j.rasd.2012.07.009](https://doi.org/10.1016/j.rasd.2012.07.009)
- [xlii] Holt V, Skagerberg E, Dunsford M. Young people with features of gender dysphoria: demographics and associated difficulties. *Clin Child Psychol Psychiatry*. 2016;21(1):108-118. Doi [10.1177/1359104514558431](https://doi.org/10.1177/1359104514558431)
- [xliii] Murad MH, Elamin MB, Garcia MZ, Mullan RJ, Murad A et al. Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clin Endocrinol (Oxf)* 2010;72(10): 214–231. Doi [10.1111/j.1365-2265.2009.03625](https://doi.org/10.1111/j.1365-2265.2009.03625).
- [xliv] De Cuypere, Elaut E, Heylens G, et al. Long term follow up: psychosexual outcome of Belgian transsexuals after sex reassignment surgery. *Sexologies*. 2006;15:126-133.
- [xlv] Dhejane C, Lichtenstein P, Boman M et al. Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. *PLOS 1*. 2011;6(2):e16885. Doi [10.1371/journal.pone.0016885](https://doi.org/10.1371/journal.pone.0016885)
- [xlvi] Nuruddin S, Bruchhage M, Ropstad E et al. Effects of peripubertal gonadotropin-releasing hormone agonist on brain development in sheep...a magnetic resonance imaging study. *Psychoneuroendocrinology*. 2013;38(10):1994-2002. Doi [10.1016/j.psyneuen.2013.03.009](https://doi.org/10.1016/j.psyneuen.2013.03.009)
- [xlvii] Nuruddin S, Wojniesz S, Ropstad E et al. Peri-pubertal gonadotropin-releasing hormone analog treatment affects hippocampus gene expression without changing spatial orientation in young sheep. *Behav Brain Res*. 2013;242(1):9-16. Doi [10.1016/j.bbr.2012.12.027](https://doi.org/10.1016/j.bbr.2012.12.027) .
- [xlviii] Nuruddin S, Krogenaes A, Brynildsrud OB et al. Peri-pubertal gonadotropin-releasing hormone agonist treatment affects sex based gene expression of amygdala in sheep. *Psychoneuroendocrinology*. 2013;38(12):3115-3127. Doi [10.1016/j.psyneuen.2013.09.011](https://doi.org/10.1016/j.psyneuen.2013.09.011)
- [xlviii] Evans NP, Robinson JE, Erhard HW et al. Development of psychophysiological motoric reactivity is influenced by peripubertal pharmacological inhibition of GnRH action-results of an ovine model. *Psychoneuroendocrinology*. 2012;37(11):1876-1884. Doi [10.1016/j.psyneuen.2012.03.020](https://doi.org/10.1016/j.psyneuen.2012.03.020)
- [xlix] Hough D, Bellingham M, Haraldsen IRH et al., 2017 Spatial memory is impaired by peripubertal GnRH agonist treatment and testosterone replacement in sheep. *Psychoneuroendocrinology*. 2017;75(1):173-182. Doi [10.1016/j.psyneuen.2016.10.016](https://doi.org/10.1016/j.psyneuen.2016.10.016)
- [li] Hough D, Bellingham M, Haraldsen IRH et al. A reduction in long-term spatial memory persists after discontinuation of peripubertal GnRH agonist treatment in sheep. *Psychoneuroendocrinology*. 2017;77(1):1–8. Doi [10.1016/j.psyneuen.2016.11.029](https://doi.org/10.1016/j.psyneuen.2016.11.029)
- [lii] Wojniesz S, Vogele C, Ropstad E et al. Prepubertal gonadotropin-releasing hormone analog leads to exaggerated behavioral and emotional sex differences in sheep. *Hormones and Behaviour*. 2011;59(1):22-27. Doi [10.1016/j.yhbeh.2010.09.010](https://doi.org/10.1016/j.yhbeh.2010.09.010)

- [lii] Grigorova M, Sherwin BB, Tulandi T. Effects of treatment with leuprolide acetate depot on working memory and executive functions in young premenopausal women. *Psychoneuroendocrinology*. 2006;31(8):935-947. Doi [10.1016/j.psyneuen.2006.05.004](https://doi.org/10.1016/j.psyneuen.2006.05.004)
- [liii] Craig MC et al. Gonadotropin hormone releasing hormone agonists alter prefrontal function during verbal encoding in young women. *Psychoneuroendocrinology*. 2007;32(8-10):116-1127. Doi [10.1016/j.psyneuen.2007.09.009](https://doi.org/10.1016/j.psyneuen.2007.09.009)
- [liiv] Nelson CJ, Lee JS, Gamboa MC et al Cognitive effects of hormone therapy in men with prostate cancer: a review. *Cancer*. 2008;113(5):1097-1106. Doi [10.1002/cncr.23658](https://doi.org/10.1002/cncr.23658)
- [liv] Ohlsson B. Gonadotrophin_releasing hormone and its physiological and pathophysiological roles in relation of the structure and function of the gastro-intestinal tract. *European Surgical Research*. 2016;57:22-33.
- [livi] Prange-Kiel J, Jarry H, Schoen M et al. Gonadotropin releasing hormone regulates spine density via its regulatory role in hippocampal oestrogen synthesis. *J Cell Biol*. 2008;180(2):417-426. Doi [10.1083/jcb.200707043](https://doi.org/10.1083/jcb.200707043)
- [li vii] Quintanar JL, [Calderón-Vallejo D](#), [Hernández-Jasso I](#). Effects of GnRH on Neurite Outgrowth, Neurofilament and Spinophilin Proteins Expression in Cultured Spinal Cord Neurons of Rat Embryos. *Neurochem Res*. 2016;41(10):2693-2698. Doi [10.1007/s11064-016-1983-0](https://doi.org/10.1007/s11064-016-1983-0)
- [li viii] Hulshoff Pol HE, Cohen-Kettenis PT, Van Haren NE, et al. Changing your sex changes your brain: Influences of testosterone and estrogen on adult human brain structure. *Eur J Endocrinol*. 2006;155(1):S107–S111. Doi [10.1530/eje.1.02248](https://doi.org/10.1530/eje.1.02248)
- [lix] Rogers v. Whitaker, High Court of Australia, [Aust Law J](#). 1993 Jan;67(1):47-55. <https://www.ncbi.nlm.nih.gov/pubmed/11648609>
- [lx] Caraty A, Skinner DC. Gonadotrophin-releasing hormone in third ventricular cerebrospinal fluid: endogenous distribution and exogenous uptake.
- [lxi] Pfaff D, Lewis C, Diakow C et al. Neurophysiological analysis of mating behavior responses as hormone sensitive reflexes. *Prog Physiol Psychol*. 1973;5:253-297
- [lxii] Moss RL McCann SM. Induction of mating behavior in rats by luteinizing hormone releasing factor. *Science*. 1973;181(4095):177-179. Doi [10.1126/science.181.4095.177](https://doi.org/10.1126/science.181.4095.177)
- [lxiii] Maney DL, Richardson RD, Wingfield JC. Central administration of chicken gonadotropin-releasing hormone-11 enhances courtship behavior in a female sparrow. *Horm Behav*. 1997;32(1):11-18. Doi [10.1006/hbeh.1997.1399](https://doi.org/10.1006/hbeh.1997.1399)
- [lxiv] Schimi PA, Rissmin EF. Effects of gonadotropin-releasing hormones, corticotrophin-releasing hormone and vasopressin on female sexual behavior. *Horm Behav*. 2000;37(3):212-220. Doi [10.1006/hbeh.2000.1575](https://doi.org/10.1006/hbeh.2000.1575)

[[lxv](#)] Riskind P, Moss RL. Midbrain Central Gray: LHRH infusion enhances lordotic behavior in estrogen-primed ovariectomized Rats. *Brain Res Bull.* 1979;4(2):203-205. Doi 10.1016/0361-9230(79)90282-X

[[lxvi](#)] Bentley GE, Jensen JP, Kaur GJ et al. Rapid inhibition of female sexual behavior by gonadotropin-inhibiting hormone (GnIH). *Horm Behav.* 2006;49(4):550-555. Doi [10.1016/j.yhbeh.2005.12.005](#)

[[lxvii](#)] Knoedler JR, Shah NM. Molecular mechanisms underlying sexual differentiation. *Current opinion in neurobiology.* 2018;53:192-197.

[[lxviii](#)] Hyer MM, Phillips LL, Neigh GN. Sex differences in synaptic plasticity: hormones and beyond. *Frontiers in Molecular Neuroscience.* 2018;11:266. Doi:10.3389/fnmol.2018.00266.

[[lxix](#)] Menzies L, Goddings A, Kirstie J et al. The effects of puberty on white matter development in boys. *Dev Cog Neurosc.*2015;11:116-128.

[[lxx](#)] Pangelinan MM, Leonard G, Perron M et al. Puberty and testosterone shape the corticospinal tract during male adolescence. *Brain Struct Funct.* 2016;221:1083-1094.

[[lxxi](#)] Schneider MA, Spritzer PM, Soll BM et al. Brain maturation, cognition and voice pattern in a gender dysphoria case under pubertal suppression. *Front Hum Neurosci.* 2017;11:528. Doi:10.3389/fnhum.2017.00528.

[[lxxii](#)] Hulshoff Pol HE, Cohen-Kettenis PT, Van Haren NE, et al. Changing your sex changes your brain: Influences of testosterone and estrogen on adult human brain structure. *Eur J Endocrinol.* 2006;155(1):S107–S111. Doi 10.1530/eje.1.02248

[[lxxiii](#)] Zubiaurre-Elorza L, Junque C, Gomez-Gil E, & Guillamon A. (2014). Effects of cross-sex hormone treatment on cortical thickness in transsexual individuals. *J Sex Med,* 2014;11(5):1248–1261. Doi <https://doi.org/10.1111/jsm.12491>

[[lxxiv](#)] Rametti G, Carrillo, B, Gomez-Gil E, Junque C, Zubiaurre-Elorza L, Segovia S., Gomez A, Karadi K, Guillamon, A. Effects of androgenisation on the white matter microstructure of female-to-male transsexuals. A diffusion tensor imaging study. *Psychoneuroendocrinology,* 2012;37, 1261–1269. Doi [10.1016/j.psyneuen.2011.12.019](#)

[[lxxv](#)] Shumer DE, Spack NP. Current management of gender identity disorder in childhood and adolescence: guidelines, barriers and areas of controversy. *Curr Opin Endocrinol Diabetes Obes.* 2013;20(1):69-73. Doi [10.1097/MED.0b013e32835c711e](#)

[[lxxvi](#)] Costa R, Dunsford M, Skagerburg E et al. Psychological support, puberty suppression, and psychosocial functioning in Adolescents with Gender Dysphoria. *J Sex Med.* 2015;12(11):2206-2214 Doi [10.1111/jsm.13034](#)

[[lxxvii](#)] de Vries AL, McGuire JK, Steensma TD et al. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics.* 2014;134(4):696-704. Doi [10.1542/peds.2013-2958](#)

[[lxxviii](#)] Schwartz D. Listening to children imagining gender: observing the inflation of an idea. Op. cit.

[[lxxix](#)] Chew D, Anderson J, Williams K et al. Hormonal Treatment in Young people with Gender Dysphoria: a systematic review. *Pediatrics* 2018;141(4). Doi [10.1542/peds.2017-3742](#)

[[lxxx](#)] de Vries AL, McGuire JK, Steensma TD et al. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*. 2014;134(4):696–704

[[lxxxi](#)] Milrod C. How young is too young: Ethical concerns in genital surgery of the transgender MTF adolescent. *J Sex Med*. 2014;11(2):338-346. Doi [10.1111/jsm.12387](#)

[[lxxxii](#)] Fuss J, Auer MK, Briken P. Gender dysphoria in children and adolescents: a review of recent literature. *Curr Opin Psychiatry*. 2015;28(6):431-434.