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Clinical guidelines for children and adolescents experiencing gender dysphoria or incongruence: a systematic review of recommendations (part 2)

Jo Taylor , Ruth Hall, Claire Heathcote, Catherine Elizabeth Hewitt , Trilby Langton, Lorna Fraser

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Department of Health Sciences, University of York, York, UK

Correspondence to
Dr Jo Taylor, Department of Health Sciences, University of York, York, UK; dohs-gender-research@york.ac.uk

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ABSTRACT

Background Increasing numbers of children and adolescents experiencing gender dysphoria/incongruence are being referred to specialist gender services and there are various published guidelines outlining approaches to clinical care.

Aim To examine the recommendations about the management of children and/or adolescents (age 0-18) experiencing gender dysphoria/incongruence in published guidelines or clinical guidance. A separate paper examines the quality and development of guidelines.

Methods A systematic review and narrative synthesis. Databases (Medline, Embase, CINAHL, PsycINFO, Web of Science) were searched to April 2022 and web-based searches and contact with international experts continued to December 2022, with results assessed independently by two reviewers. The Appraisal of Guidelines for Research and Evaluation tool was used to examine guideline quality.

Results 23 guidelines/clinical guidance publications (1998–2022) were identified (4 international, 3 regional, 16 national). Guidelines describe a similar care pathway starting with psychosocial care for prepubertal children, puberty suppressants followed by hormones for eligible adolescents and surgical interventions as these adolescents enter adulthood. In general, there is consensus that adolescents should receive a multidisciplinary assessment, although clear guidance about the purpose or approach is lacking. There are differing recommendations about when and on what basis psychological and medical interventions should be offered. There is limited guidance about what psychological care should be provided, about the management of prepubertal children or those with a non-binary gender identity, nor about pathways between specialist gender services and other providers.

Conclusions Published guidance describes a similar care pathway; however, there is no current consensus about the purpose and process of assessment for children or adolescents with gender dysphoria/incongruence, or about when psychological or hormonal interventions should be offered and on what basis.

PROSPERO registration number CRD42021289659.

WHAT IS ALREADY KNOWN

⇒ Increasing numbers of children and adolescents are being referred to specialist gender services.
⇒ Several clinical guidelines exist to support the clinical care of children and adolescents with gender dysphoria/incongruence and their families.
⇒ There are divergent clinical approaches to the management of these children/adolescents and a need to synthesise guideline recommendations to explore areas of consensus, disagreement or uncertainty.

WHAT THIS STUDY ADDS

⇒ The clinical guidance identified describes a similar care pathway involving psychosocial care for prepubertal children followed by medical interventions for adolescents who meet certain criteria.
⇒ There is consensus that those requiring specialist gender care should receive a multidisciplinary assessment and be offered psychosocial support, although there is a lack of clarity about who should be involved in this and any differences for children and adolescents.
⇒ There are differing recommendations about when and on what basis psychological and hormone interventions should be offered, and limited guidance about prepubertal children or those with a non-binary gender identity.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Clinicians should consider the diverging recommendations about when and on what basis psychosocial or hormone interventions should be offered to children and adolescents when working with this population. Detailed guidance to support psychological care is needed.

INTRODUCTION

The prevalence of gender dysphoria/incongruence in children and adolescents is currently unknown due to limited population-level data.[1 2] However, the number of referrals to paediatric gender services internationally has increased over the last 10-15 years.[2] These children and adolescents require timely, appropriate and evidence-based care. Numerous guidelines exist to inform healthcare provision for this population.[3 4] However, there remains debate about the most appropriate assessment and care pathways.[5]

Three systematic reviews have appraised clinical guidelines for transgender care.[3 4 6] They each focus on a subset: Dahlen *et al*[3] reviewed international

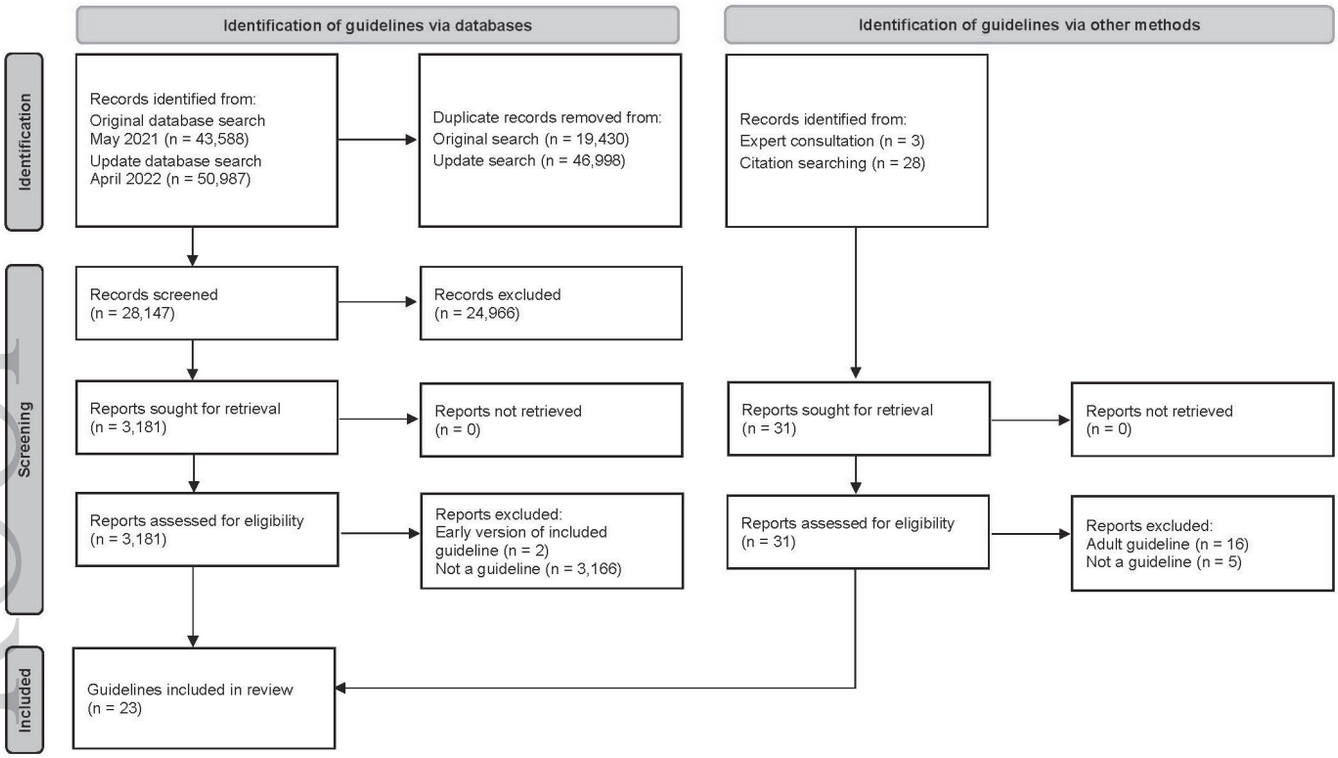

Figure 1 Study flow diagram.

guidelines, and Ziegler *et al*[4 6] focused on guidelines for use in primary care. This systematic review builds on these by appraising and synthesising all published clinical guidance that includes recommendations regarding the care of children/adolescents experiencing gender dysphoria/incongruence. The review is reported in two papers. The first describes the review methods and examines guideline quality and development.[7] This second paper provides a synthesis of recommendations.

METHODS

This review forms part of a linked series examining the epidemiology, care pathways, outcomes and experiences for children and adolescents experiencing gender dysphoria/incongruence (PROSPERO registration number CRD42021289659[8]).

To synthesise recommendations, we identified common areas of clinical care for which recommendations are given and worked systematically through guidance to extract and summarise recommendations pertaining to each topic. This enabled us to map recommendations as well as identify areas of consensus, uncertainty or disagreement. The full methods for this review are reported in the first paper.[7]

RESULTS

In total, 15 guidelines and 8 clinical guidance publications including at least one recommendation about the management of children/adolescents experiencing gender dysphoria/incongruence were identified (figure 1). The term guideline will be used in the synthesis.

Guidelines were published from 1998 to 2022. Four guidelines are international,[9–12] three regional (Europe,[13] Asia and the Pacific,[14] the Caribbean[15]) and others national (four US,[16–19] two Spain[20 21] and one from Australia,[22 23] Canada,[24] Denmark,[25] Finland,[26] Italy,[27] New Zealand,[28 29] Norway,[30] South Africa,[31 32] Sweden[33] and the UK[34]).

Nine guidelines are about management of children and/or adolescents experiencing gender dysphoria/incongruence.[11 19 20 22 24 26 27 33 34] One focuses on co-occurring autism spectrum condition (ASC) and gender dysphoria/incongruence.[12] Others cover broader populations (online supplemental table 1 and figure 2).

Guideline quality varies; the majority are of low to moderate quality. The development and recommendations of most guidelines were influenced by two international guidelines—version 7 of the World Professional Association for Transgender Health (WPATH) guideline published in 2012[35] (version 8 was published in 2022[9]), and the 2009[36] and 2017[10] versions of the Endocrine Society guideline. Details about this and guideline quality are reported in the first paper.

Guideline synthesis

The following sections summarise recommendations for key areas of practice identified (box 1). More guidelines focus on medical treatments than psychosocial care. The synthesis includes the latest version of guidelines and may not capture changes within guidelines over time.

Care models

Most guidelines recommend that a specialist multidisciplinary team of mental health professionals, endocrinologists and other professionals with expertise in gender and child development delivers assessment and care. Acknowledging different healthcare infrastructures, the WPATH guideline[9] and regional blueprints for Asia and the Pacific[14] and the Caribbean[15] recommend healthcare professionals involve relevant disciplines as an alternative to establishing multidisciplinary teams.

Six guidelines discuss the role of other services. The UK Royal College of Psychiatrist (RCPsych) guideline[34] recommends mental health services assess for gender dysphoria and

Figure 2 A timeline for the included guidelines by geographical region, country and target population. AACAP, American Academy of Child and Adolescent Psychiatry; AAP, American Academy of Pediatrics; APA, American Psychological Association; ESSM, European Society for Sexual Medicine; HPP, Health Policy Project; PAHO, Pan American Health Organisation; RCHM, Royal Children's Hospital Melbourne; RCPsych, UK Royal College of Psychiatrists; SAHCS, South African HIV Clinicians Society; SAHM, Society for Adolescent Health and Medicine; SSEN, Spanish Society of Endocrinology and Nutrition; UCSF, University California, San Francisco; WPATH, World Professional Association for Transgender Health.

co-occurring mental health difficulties. The University California, San Francisco guideline[16] states that paediatricians may provide care while recommending a role for mental health professionals. More recently, the Finnish,[26] Norwegian[30] and Swedish[33] guidelines recommend that local mental health services provide assessment and psychosocial interventions, and the Finnish guideline describes multiple different pathways between local mental health and specialist gender services.[26] The Australian guideline outlines the roles for different professionals who might be involved in the assessment and/or care of a child/adolescent, although there is a lack of clarity about the referral pathways between local and specialist gender services. This is the only guideline that discusses transition to adult gender services, and recommends support for this.[22]

Box 1 Main practice areas in guidelines

- ⇒ Care models, principles and practices
- ⇒ Multidisciplinary team composition, roles, competencies and training
- ⇒ Assessment
- ⇒ Psychosocial care
- ⇒ Information, education and advocacy
- ⇒ Social transition
- ⇒ Puberty suppressant hormones
- ⇒ Feminising/Masculinising hormones
- ⇒ Surgical interventions
- ⇒ Fertility care
- ⇒ Other interventions (eg, voice therapy, hair removal)
- ⇒ Sexual health and functioning
- ⇒ Physical health and lifestyle

Most guidelines distinguish between care for prepubertal children and adolescents, recommending a phased approach. This begins with psychosocial support for children/adolescents and parents, followed by puberty suppressants and then hormones for adolescents, and surgical interventions in adulthood (figure 3). Assessment and psychoeducation are suggested along the pathway. Two guidelines[27 33] explicitly adopt the Dutch model (the earliest paediatric treatment protocol[37]), and most guidelines reflect this pathway. One of these, however, recommends that medical interventions occur under a research framework and modifies the original criteria for treatment.[33] Four guidelines propose an individualised approach to medical interventions, while still describing a phased approach.[16 22 28 31]

Care principles lack consensus and clarity about theoretical models or approaches. The following are referred to: informed consent model, a minority stress approach, a developmental

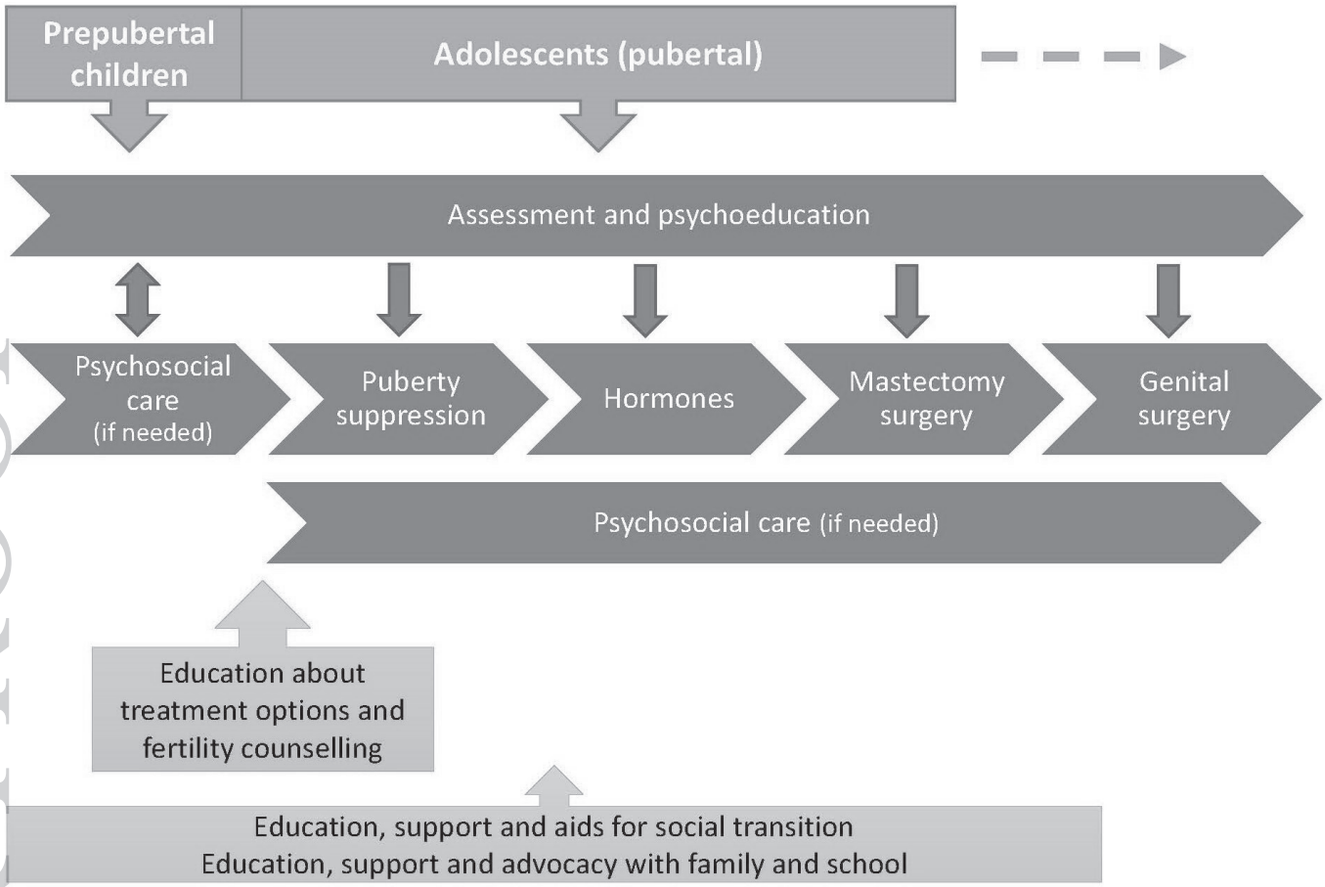

Figure 3 The phased pathway of assessment and care described across the guidelines.

approach and individualised or person-centred care. Sixteen guidelines use the term gender-affirming. Eight promote gender-affirming healthcare as a care principle,[9 11 16 18 19 22 28 31] defined as 'healthcare that is respectful and affirming of a person's unique sense of gender and provides support to identify and facilitate gender healthcare goals'.[28] The other eight use the term as a label for interventions like hormone treatments.[10 12–15 26 30 33]

Assessment

All guidelines recommend multidisciplinary assessment. Three types were identified: (1) comprehensive psychosocial assessment, (2) medical or 'readiness' assessment for adolescents seeking hormonal treatments and (3) diagnostic assessment for gender dysphoria/incongruence. Some guidelines integrate these, while others present them separately. In most guidelines, there is no distinct assessment section or recommendations. There is limited clarity about assessment purpose. Most cited reasons are to inform a care plan, or assess eligibility for hormone treatment. Although most guidelines describe different pathways for children and adolescents, only three provide separate guidance.[9 22 31] Five recent guidelines propose that prepubertal children only require assessment if gender-related psychosocial care is needed but provide limited detail about this.[9 22 26 28 30] Others propose all children be assessed. There is little consideration of how a psychosocial assessment might be different for children and adolescents.

Assessment domains

All guidelines recommend that discussion of gender development and identity forms part of assessment, however few provide detail. Several recommend assessing duration, severity, and persistence of gender dysphoria, and exploring different aspects including incongruence, distress, identity, expression, plans and future desires. Only four guidelines suggest formal measures to assess gender.[9 17 24 33] Three name specific measures, without a strong recommendation to use them (online supplemental table S2).[17 24 33] In the eight guidelines referring to a diagnostic classification system, four recommend the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition[37] gender dysphoria classification,[17 24 27 33] three the International Classification of Diseases[38] gender incongruence[9 30 31] and four either.[10 21 22 34]

Sixteen guidelines suggest what else should be assessed (table 1).[9 10 13–15 17 18 22 24 25 27 28 30 31 33 34] Common domains include mental health, family functioning/support and psychosocial functioning. Less common domains include cognition/intellectual functioning, sexuality, sexual health, physical health and body image/satisfaction. The latter is discussed in seven guidelines[9 10 12 24 28 31 33] but only recommended for assessment in one.[24]

Five guidelines recommend assessing for neurodevelopment conditions. The guideline by Strang *et al* recommends those with gender dysphoria/incongruence be screened for ASC and vice versa.[12] The Swedish guideline recommends screening for ASC and attention deficit hyperactivity disorder.[33] The South African HIV Clinicians Society (SAHCS),[31] New Zealand[28] and WPATH[9] guidelines also recommend assessing for ASC. The guideline by

Table 1 Recommended assessment domains

Guideline ID	Gender	Body image	Mental health difficulties	Neurodiversity or ASC	Sexuality or sexual orientation	Sexual functioning or health	Psychosocial functioning	Cognitive functioning/ intelligence/ maturity	Family functioning or support	Physical health or conditions
American Academy of Child and Adolescent Psychiatry[17]	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No
American Psychological Association[18]	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Danish Health Authority[25]	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes
de Vries *et al*[24]	Yes	Yes	Yes	No	Yes*	Yes*	Yes	No	Yes	No
Endocrine Society[10]	Yes	No	Yes	No	Yes†	No	Yes	No	Yes	No
European Society for Sexual Medicine[13]	Yes	No	Yes	No	No	No	Yes	No	Yes	No
Health Policy Project[14]	Yes	No	Yes	No	Yes*	Yes*	Yes	No	Yes	Yes
Norwegian Directorate of Health[30]	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes
Oliphant *et al*[28 29]	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	No
Pan American Health Organisation[15]	Yes	No	Yes	No	No	No	No	No	No	Yes
Royal Children's Hospital Melbourne[22 23]	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No
The Royal College of Psychiatrists[34]	Yes	No	Yes	No	No	No	Yes	No	Yes	No
SIAMS-SIE-SIEDP-ONIG[27]	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No
South African HIV Clinicians Society[31 32]	Yes	No	Yes	Yes	No	No	Yes	No	Yes	No
The Swedish National Board of Health and Welfare[33]	Yes	No‡	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
World Professional Association for Transgender Health[9]	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes

*HEEADSSS suggested as tool which includes sexuality.
†Assessment of psychosexual development.
‡Body image scale identified as useful tool.
ASC, autism spectrum condition; HEEADSSS, psychosocial assessment tool covering Home & Environment, Education & Education, Eating & Exercise, Activities, Drugs/Substances, Sexuality, Suicide/depression, Safety.

Strang *et al*,[12] and Swedish[33] and WPATH[9] guidelines suggest children with ASC may require extended assessment. There is a lack of guidance about what support might be indicated if both are present.

Assessment process

Recommendations regarding assessment process are sparse. Several guidelines suggest using multiple methods[9 24 27 33] and gathering information from multiple sources.[9 10 12 24 27 31 33] Nine guidelines describe a process involving multiple sessions with children/adolescents and/or parents.[9 12 14 15 19 24 27 31 33] One guideline suggests joint and separate sessions.[15] Four guidelines discuss confidentiality, with emphasis on giving the child/adolescent a safe and confidential environment and discussing limits of confidentiality.[9 17 31 33] The WPATH guideline recommends considering factors affecting accurate reporting by child/adolescent or caregiver(s).[9] Three guidelines outline when parental involvement may not be appropriate.[9 31 33] Three other guidelines identify confidentiality as an overall principle of care.[22 24 28]

Only the Swedish[33] and WPATH[9] guidelines contain detail on assessment process. Both recommend duration, structure and content be varied according to age, complexity and gender development. The Swedish guideline discusses benefits and risks of assessment, and recommends providing information about this.[33]

Psychosocial care

Psychosocial care for children and adolescents

All but two guidelines[11 20] describe psychosocial care as a key care component. Less consensus exists about approach, and there is limited guidance. There is little consideration of any differences in provision for prepubertal children versus adolescents. Guidelines use varying different terms, including psychosocial care, psychological care or psychotherapy, which are not defined. Most guidelines describe multiple aims with limited agreement. These range from supporting exploration of gender experiences and identity; improving psychosocial functioning; treating co-occurring mental health difficulties; facilitating healthy psychosexual development; alleviating gender-related distress/dysphoria; assisting families to create a gender-affirming environment; preparing/supporting social or medical transition and support to manage stigma or discrimination.

Most guidelines describe a needs-based approach and five recent guidelines state not all children or adolescents will require psychosocial care.[9 22 28 30 31] All but one of these[30] promote a model of gender-affirming healthcare and indicate that those with 'a stable gender identity' and 'supportive family and school environment' may not require psychosocial care. This recommendation marks a departure from earlier guidelines which describe psychosocial care as the mainstay of treatment, and the recent Finnish[26] and Swedish[33] guidelines which describe it as first-line treatment for childhood gender dysphoria/incongruence.

In around half of the guidelines, assessment and psychosocial care are presented as overlapping.[12–15 21 22 25 27 31 33 34] Only the European Society for Sexual Medicine (ESSM)[13] and Swedish[33] guidelines recommend psychosocial support for gender exploration during the assessment process. Other guidelines emphasise the importance of gender exploration, although there is a lack of definition and consensus, particularly regarding adolescents. For example, the ESSM[13] and Swedish[33] recommendations do not distinguish between children and adolescents. In contrast, the Australian[22] and WPATH[9] guidelines identify gender exploration for children as potentially useful whereas recommendations for adolescents focus on psychosocial support for social and/or medical transition. Several other guidelines adopt this approach, citing evidence that gender development is more fluid in childhood, that most children will not experience gender dysphoria/incongruence into adolescence and uncertainty about which children will have persistent dysphoria/incongruence.[10 14 16 18 34]

Most guidelines recommend co-occurring mental health difficulties are assessed and managed.[9 10 12–16 18 21 22 24–28 30 31 33 34] Only five consider how this might be integrated with psychological care for gender incongruence/dysphoria. The Finnish guideline recommends that local and specialist mental health services provide psychosocial support and any psychological care that is needed.[26] The early RCPsych guideline,[34] and the Swedish[33] and Danish[25] guidelines describe more of an integrated approach, although clarity and detail is lacking. The latter two recommend mental healthcare is provided outside the gender service if needed. The Australian guideline contains no explicit recommendation but describes different pathways depending on presentation.[22]

Several guidelines acknowledge additional challenges in caring for looked after children.[9 11 16 22 24 31] The Australian guideline suggests providing advocacy for these children and support for carers.[22]

Psychosocial support for parents

Seventeen guidelines discuss psychosocial support for parents.[9 13–19 21 22 24–26 28 30 31 33] While there is no consensus or clear purpose detailed, most highlight that children benefit from parental support in their gender development or care. There is no consensus about which interventions should be offered, and terms applied include counselling, supportive counselling, psychosocial support, support, education, psychoeducation, consultation and psychotherapy. Five guidelines recommend considering family therapy.[17–19 21 24] There is no consideration of how parental support may be different for those of prepubertal children versus adolescents.

Psychoeducation and advocacy

Most guidelines suggest providing education about gender development and identity to children/adolescents and families, although detailed guidance is lacking.[9 12–19 22 24 27 28 30 31 33] Several guidelines suggest peer support groups,[9 15 17 22 24 28 30 31 33] with a further two suggesting this for 'people' but not specifically children/adolescents.[14 18] Joint working, education and/or advocacy with schools and other services is recommended in 17 guidelines.[9 11 13–19 22 24 26 28 30 31 33 34]

Social transition

Eighteen guidelines discuss social transition.[9 10 12–19 21 22 24 28 30 31 33 34] Nearly all recommend providing information about benefits and risks of social transition, and psychosocial care for decision-making and during social transition, although detailed guidance is limited. Several guidelines recommend an educational and advocacy role with families, schools and other settings. Guidelines vary in whether recommendations refer to children and adolescents. For example, in the Australian,[22] South African[31] and WPATH[9] guidelines, recommendations are included in sections about children but not adolescents.

Two early guidelines[34 35] describe social transition decisions as ones requiring clinical judgement; others do not. The WPATH[9] and Swedish[33] guidelines discuss the limited evidence base regarding social transition, particularly for prepubertal children, and these and several others including the American

Psychological Association[18] and SAHCS[31] guidelines recommend framing social transition in a way that ensures children/adolescents feel free to reconsider or reconceptualise their gender feelings as they develop.

Six guidelines discuss items such as binders or packers for adolescents.[9 22 24 28 31 33] A further four include recommendations for 'people',[14–16 30] which may apply to adolescents. Most recommend education about risks and benefits and if necessary safe use. The Swedish guideline[33] recommends health services provide items to facilitate transition for adolescents after full assessment. The Norwegian guideline recommends this for 'people', which may apply to adolescents.[30]

Medical treatments

Medical treatments are not recommended for prepubertal children in any guideline.

For adolescents, most guidelines describe a phased approach starting with puberty suppression (specifically gonadotropin-releasing hormone analogues) before feminising/masculinising hormones (oestrogen or testosterone). The Swedish guideline is unique in recommending that hormone treatments be provided under a research framework and in exceptional cases until this is established.[33] The Finnish guideline, which describes medical treatments for adolescents as experimental due to the limited evidence-base, also recommends a cautious approach and mandates that medical treatments are only provided in two centralised research clinics which should collect data about the outcomes of treatment.[26] Three recent guidelines[9 30 31] use gender incongruence as the clinical indication for treatment,[38] others use gender dysphoria.[39]

Seven guidelines provide treatment protocols.[9 10 16 21 22 27 28] The Endocrine Society guideline[10] is the basis for others, resulting in similar recommendations regarding treatment contraindications, dosing, menstrual suppression and physical health risks and monitoring. Few guidelines address known treatment side effects and monitoring recommendations omit these.

Puberty suppression

Puberty suppressing treatments are discussed in all but one guideline.[34] Across guidelines there is ambiguity regarding treatment aims with various presented, including reducing gender-related distress/dysphoria, improving quality of life, allowing time for decision-making, supporting gender exploration or prolonging the diagnostic phase. Most guidelines emphasise full reversibility as a justification, while highlighting potential adverse effects on bone health, and uncertainty regarding cognitive development. Some guidelines discuss concerns about prolonged use, although few provide management suggestions. The Australian guideline[22] recommends vitamin D or early initiation of hormones as potential approaches.

Thirteen guidelines present eligibility criteria for puberty suppression.[9 10 13–15 20–22 24 25 27 28 33] Twelve recommend waiting until a child has achieved at least Tanner stage 2 of puberty, and the Swedish guideline recommends Tanner stage 3 to ensure adolescents experience more of puberty. This and the WPATH guideline discuss different options for treatment in early stage versus late-stage puberty.[9 33] Other common criteria are: presence of gender dysphoria (n=11) or incongruence (n=2), gender dysphoria has emerged or worsened at onset/progression of puberty (n=9), mental health difficulties are managed/unlikely to impact treatment (n=9), the adolescent has decision-making capacity (n=8), and parental consent (n=8). Several guidelines also require family/social support (n=6). Only two guidelines specify a minimum age (of 12 years).[20 33]

Masculinising/Feminising hormones

All but one guideline[34] discusses hormones for adolescents and eight provide eligibility criteria.[9 10 21 22 25 27 28 33] Common criteria are: presence of gender dysphoria (n=7) or incongruence (n=1) with most requiring persistence over time, capacity to consent (n=8) and that mental health difficulties are managed/unlikely to affect treatment (n=6). Several require parental consent (n=5) and/or family/social support (n=4). Most guidelines reference age 16 years as the typical starting point, although only five specify this as the minimum age.[20 21 27 30 33] Two of these require the adolescent to have lived experience in their gender identity, one from Spain published in 2012[21] and the Swedish guideline published in 2022.[33] One guideline recommends puberty suppression before initiating hormones.[24]

There are no recommendations about how to manage adolescents who, having started to medically transition wish to detransition (discontinue treatment and live as their birth-registered sex or retransition to an alternative gender[40]), although the Swedish[33] and WPATH[9] guidelines recommend supporting these adolescents.

Surgical treatments

Fourteen guidelines include recommendations about surgery. Six do not recommend surgery for adolescents.[21 24 26–28 34] Six do not recommend genital surgery but support mastectomy.[10 16 22 25 30 33] Only the Swedish guideline[33] includes minimum age criterion[17] for mastectomy if carried out under a research framework. The two remaining guidelines (WPATH[9] and SAHCS[31]), which also support surgery, include no restrictions for adolescents, although WPATH suggests phalloplasty be delayed until adulthood.

Nine guidelines offer no clear recommendations; three describe practice that includes chest surgery for adolescents,[14 15 19] three describe surgery as deferred until adulthood[12 17 20] and three contain no discussion.[11 13 18]

Fertility and sexual healthcare

Eighteen guidelines recommend providing information regarding the impact of hormones and surgery on fertility, and fertility preservation options with consensus that this should precede treatment initiation. Four of these guidelines,[9 10 22 33] published post-2017, explicitly require this for hormone treatments. Fertility counselling and preservation recommendations are lacking.

Few guidelines include recommendations about sexual healthcare and primarily discuss pregnancy-prevention and sexually transmitted diseases. The ESSM guideline seeks to address this gap by recommending psychosexual education about the effects on body satisfaction and sexual function before any interventions.[13] This is also recommended in the Swedish[33] and WPATH[9] guidelines.

Management of children/adolescents with non-binary gender identities

Fourteen guidelines recommend care that views gender as a spectrum.[9 11–13 16 18 19 22 24 26 28 30 31 33] Three guidelines explicitly discuss provision for those who identify as non-binary. The Swedish[33] and Norwegian[30] guidelines do not recommend hormone treatments due to lack of evidence. The Swedish guideline recommends non-binary children/adolescents receive psychosocial care.[33] Recommendations in the WPATH guideline are included in a separate chapter about non-binary people, which may apply to adolescents.[9]

DISCUSSION

This systematic review identified 23 clinical guidance publications (1998 to 2022), 9 focusing on management of children/adolescents

with gender dysphoria/incongruence.[11 19 20 22 24 26 27 33 34] The review identified areas on which there is agreement and areas of divergence and uncertainty with limited guidance on how to implement recommendations. Overall, guidelines describe a care pathway similar to the original Dutch protocol that involves psychosocial care for prepubertal children followed by hormonal interventions for adolescents who meet specific criteria, provided by a specialist multidisciplinary team.[41] This approach continues to dominate clinical guidance despite lack of high-quality evidence regarding treatments,[42–50] or exploring alternative care models.[5]

Although guidelines recommend similar treatments there are different recommendations about when hormone interventions should be offered and on what basis. The Dutch protocol required a diagnosis of gender dysphoria from early childhood that intensified during puberty as well as applying minimum age criterion for puberty suppressants and hormones.[37] Most subsequent guidance, influenced by WPATH version 7,[35] lacked minimum age criteria until the Swedish guideline re-introduced these.[33] The Swedish guideline additionally recommends adolescents are exposed to puberty until Tanner stage 3. The Swedish and Finnish guidelines require a diagnosis of gender dysphoria. In contrast, the South African,[31] Norwegian[30] and WPATH[9] guidelines specify gender incongruence as the treatment indication. The Finnish guideline, which views medical treatments for adolescents as experimental due to the limited evidence-base, recommends a cautious approach and the need for the centralised research clinics that provide these treatments to collect outcome data. The Swedish guideline recommends that these treatments are only provided under a research framework. This differs considerably to other guidance which identifies reversibility of puberty suppression as key justification for its use in practice, despite uncertainty about long-term effects.[45 48 51] A report by the Norwegian Healthcare Investigation Board[52] recommends a change in line with the cautious approach adopted by Sweden and Finland.[52]

Detailed guidance regarding assessment is lacking with no consensus about the aim or clinical approach, nor the necessity for assessment in prepubertal children. Although most guidance recommends assessing gender, mental health, psychosocial and family functioning, other domains vary. Few guidelines recommend exploring sexual orientation or assessing body image, despite these being identified as important factors.[1 18 53] Few recommend specific assessment tools, and those suggested have not been developed and/or validated for this population.[54–56]

Psychosocial care is recommended across guidelines, but detailed guidance is limited. Specifically lacking are recommendations regarding psychological care, how this overlaps with assessment, which children/adolescents receive it and how to manage co-occurring psychosocial concerns. There is a lack of clarity about how local mental health and gender services should work together. Such guidance may help reduce barriers to equitable and evidence-based care. However, limited research about psychosocial care for this population may prevent development of evidence-based guidance.[42–44]

There is uncertainty regarding management of specific groups highlighted in the literature, for example, those with non-binary identities, or those presenting in mid-adolescence without a long-standing history of gender incongruence.[57 58] The Dutch protocol was not developed for these groups,[37] and they may have different outcomes and needs. There is consensus among international experts that adolescents experiencing gender dysphoria/incongruence should be screened for ASC and those with co-occurring ASC may require extended assessment,[12] but detailed guidance is lacking.[12 59] Finally, there are no recommendations about the management of those who, having started to socially or medically transition, wish to desist, detransition or 're-transition'.[40]

Strengths and limitations

Strengths include a published protocol, robust search strategies and comprehensive narrative synthesis. Including no date restrictions enabled us to map the development of guidance in this area of practice and consider how recommendations have changed. However, including older guidelines may have shaped the synthesis and review conclusions. Some guidelines not published in English may not have been identified. As searches were conducted to April 2022, this review does not include more recently published guidance; as this is a rapidly evolving area this is a limitation.

CONCLUSIONS

Published guidance recommends a care pathway for children and adolescents experiencing gender dysphoria/incongruence for which there is limited evidence about benefits and risks, and long-term effects. Divergence of recommendations in recent guidelines suggest there is no current consensus about the purpose and process of assessment, or about when psychosocial care or hormonal interventions should be offered and on what basis.

Contributors LF and TL conceived the study. LF, TL, JT, RH, and CH contributed to the design of the review. JT, RH and CH conducted selection, extraction and synthesis. JT, CEH, RH, LF, and TL assisted with interpretation of synthesis. JT drafted the manuscript. All authors contributed to and reviewed the manuscript before submission. CEH accepts full responsibility for the finished work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

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ORCID iDs
Jo Taylor http://orcid.org/0000-0001-5898-0900
Catherine Elizabeth Hewitt http://orcid.org/0000-0002-0415-3536

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