

TREATMENT GUIDELINES FOR CHILDREN WITH GENDER DYSPHORIA

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I. INTRODUCTION

Over the last 10 years, there appears to be an upward trend in the proportion of transgender and gender diverse (TGD) individuals seeking support and services through healthcare services as well as reported in population-based surveys (Goodman et al., 2019). Researchers and clinicians generally use TGD as an umbrella term that includes a whole dimension or spectrum of gender-identity conditions such as “gender non-conformity”, “gender non-binary”, “gender fluidity” and others.

The age of help-seeking for individuals with TGD appears to be getting lower (Ashley, 2019; Pang et al., 2020; Zhang et al., 2020), likely due to changes in sociopolitical climates, cultural values and help-seeking behaviour across generations. However, the prevalence currently remains an estimate, in part due to a lack of high-quality studies on this area, especially when there is variability in the definitions of the TGD population, as well as differences in the data collection methods. The current estimated proportions of TGD people in the general population based on health systems-based studies is between 0.02 to 0.1%. Specifically, for children and adolescents, survey-based studies reported an estimate of 1.2 to 2.7% who self-identified themselves as transgender individuals, and up to 8.4% as TGD individuals with broader manifestations of gender diversity (Coleman et al., 2022). For children, variability in gender expression may start between ages 2 to 4, the age when most children begin showing gendered behaviour and interests. Gender nonconforming behaviours and preferences are frequently transient during childhood. (Butler, et al., 2018). At age 6 or 7, a child’s gender identity may become more consistent (Bonifacio & Rosenthal, 2015). However, in most studies, the gender trajectories of prepubescent children are highly unpredictable (Steensma et al., 2013).

TGD is generally not considered a medical diagnosis as individuals with TGD do not necessarily go on to experience mental health symptoms. The authors have hence focused on developing a set of guidelines for the clinical diagnosis of gender dysphoria (GD), a psychiatric condition defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) by significant psychological and emotional symptoms arising from marked incongruence between one’s experienced/expressed gender and assigned gender, resulting in significant distress and impairment to one’s overall functioning in life. (Refer to Page 6 for full description of GD in DSM-5.)

For the majority of the children, the symptoms of GD may remit around or after puberty (Ristori & Steensma, 2016). The adolescence period between 10 and 13 years is considered crucial as both GD “persisters” and “desisters” have stated that multiple psychosocial factors affected their gender identities during this period, such as changes in their social environment and physical bodies, the first experiences of falling in love and sexual attraction. The experiences during this period and their childhood experiences often impact the development of their identity, well-being, and quality of life (Anda et al., 2010; Masten & Cicchetti, 2010; Shonkoff et al., 2011).

De Vries and colleagues (2011) observed from a follow-up study on 70 prepubertal candidates that the high subscription for puberty suppression in children could be self-fulfilling in nature to encourage a young child with GD to socially impersonate the opposite sex (social affirmation). This might inadvertently set in place the inevitable outcome of transgender identification, when normally 80-95% of prepubertal youth do not persist in their GD (American College of Pediatricians, 2017). Nonetheless, there is an association between GD and childhood physical, psychological, sexual abuse, as well as lifetime post-traumatic stress disorder.

As there is paucity of long-term outcome studies and consistently demonstrated improvements with medical treatment, more research will be required in these areas.

While there is limited data to make a conclusive treatment recommendation, it is the hope of our Workgroup that this set of national guidelines on the management of GD in prepubertal children will be useful for all medical, allied health professionals and other members of the multidisciplinary care team and set the much-needed safety criteria for GD treatment moving forward. Further training in this area is highly recommended to improve the holistic and safe management for this group of vulnerable patients. We further recognise that changes to these guidelines may be necessary with emerging evidence on the topic and evolution of the understanding of GD over time.

II. SUMMARY OF RECOMMENDATIONS

The basic tenets of assessment and intervention in prepubertal children with GD include the following:

1. Periodic assessment which does not entail physical intervention is generally recommended. This may be done by relevant healthcare professionals.
2. In addition to obtaining a thorough medical and developmental history, the child's mental health, developmental stage, communication and cognitive abilities, likelihood for neurodivergence (e.g. autism spectrum disorders), and behavioural challenges causing functional difficulty should be assessed for.
3. Setting up a non-judgmental and safe environment for children and their parents will allow for optimal outcomes from care providers.
4. Organising appropriate level of support – while most children and families benefit from some psychological support, the level of support depends on their unique clinical and psycho-social circumstances.
5. Presence of family stressors, e.g. poverty, unemployment, terminal illness in a family member, family history of mental illness or behavioural issues, can impact how gender diversity in children could be perceived and treated within the family.
6. Due to the high psychiatric comorbidities in children with gender dysphoria, assessment and treatment of concurrent mental health problems should be carried out.
7. Problems and stresses in the child's environment, such as peer relationships, school functioning, problems with bullying and stigma against GD, should be addressed.
8. Clinicians should encourage and facilitate continuous, open conversations within families about child's exploration of own gender identity and gender expression, and if appropriate, the role of social transitioning, its implications and support required.
9. Medical interventions should not be carried out in children with GD.
10. Management of GD in children should be done by a multidisciplinary team which can include child psychiatrists, allied health and others.
11. Engaging agencies outside of healthcare (e.g. schools and social services) into the overall ecosystem of care for the child with GD would provide a more holistic approach in its total management.
12. There should be a timely and smooth transition to adolescent and adult psychiatric and medical services as a child with GD becomes a young adult to ensure continuity of care and longer term clinical follow up when necessary.

III. DEFINITIONS

Gender

“Gender” is defined by the World Health Organization (WHO, n.d.) as the socially constructed characteristics of women, men, girls, and boys. These include norms, behaviours and roles associated with being a woman, man, girl, or boy, and the relationships with each other. It varies from society to society and can change over time. “Sex” is defined under the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as a biological indicator of male or female, by means of the sex chromosomes, gonads, sex hormones and non-ambiguous internal and external genitalia (American Psychiatric Association, 2013).

Gender identity refers to a person’s deeply felt, internal and individual experience of gender, which may or may not correspond to the person’s physiology or designated sex at birth (American Psychiatric Association, 2013).

1. Diagnostic Classification

Gender dysphoria

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) provides an overarching diagnosis of gender dysphoria with specific criteria for children.

Gender dysphoria in children is defined as a marked incongruence between one’s experienced/expressed gender and assigned gender, lasting at least 6 months, as manifested by at least six of the following (one of which must be the first criterion):

- A strong desire to be of the other gender or an insistence that one is the other gender (or some alternative gender different from one’s assigned gender)
- In boys (assigned gender), a strong preference for cross-dressing or simulating female attire, or in girls (assigned gender), a strong preference for wearing only typical masculine clothing and a strong resistance to the wearing of typical feminine clothing
- A strong preference for cross-gender roles in make-believe play or fantasy play
- A strong preference for the toys, games or activities stereotypically used or engaged in by the other gender
- A strong preference for playmates of the other gender
- In boys (assigned gender), a strong rejection of typically masculine toys, games, and activities and a strong avoidance of rough-and-tumble play; or in girls (assigned gender), a strong rejection of typically feminine toys, games, and activities
- A strong dislike of one’s sexual anatomy
- A strong desire for the physical sex characteristics that match one’s experienced gender

The condition must be associated with clinically significant distress or impairment in social, occupational, and other important areas of functioning.

2. Definition of Children

A child is defined as a person in the developmental period between infancy and puberty. Puberty is broadly defined as the time at which a child develops secondary sexual characteristics and reproductive function. The onset of puberty is characterised by the activation of the gonads by follicle stimulating hormone (FSH) and luteinising hormone (LH). Clinically, the first signs of puberty would include thelarche (Breast Tanner stage 2) in girls and testicular enlargement in boys. (Annex 1)

As there are important differences in terms of assessment and management between prepubertal children and older children including adolescents, this current set of guidelines is limited to children who have yet reached puberty (before Tanner Stage 2). The approaches and interventions for those who have achieved puberty will be included in a separate set of guidelines for adolescents.

IV. OVERVIEW OF TREATMENT OPTIONS FOR GENDER DYSPHORIA

The management of GD in children is highly complex and can be difficult for even the most well-trained clinician, given its background of medico-legal, ethical, social and cultural factors associated with GD. Therefore, management of GD in children should always be done by a multidisciplinary team which can include child psychiatrists, allied health professionals and others.

1. QUALIFICATIONS OF HEALTHCARE PROFESSIONALS

A. Medical Doctors (Psychiatrists, Endocrinologists, Reproductive Medicine Specialists, Paediatricians etc.)

Irrespective of whether a child with suspected GD is first seen by a general practitioner, paediatrician or even a gynaecologist, the child should be referred to a multidisciplinary team for diagnosis and management. This team may include child psychiatrists, paediatricians, allied health professionals and others. This allows the child to be best managed by the healthcare professionals with the relevant training and experience.

The overall requirements for medical doctors managing children with gender dysphoria are

- Adequate training in their respective field of specialty
- Familiarity with the developmental spectrum and the neurodiversity across the early childhood life course
- Competence in cross-disciplinary diagnosis and practices
- Competence in systems-based treatment and collaboration with other medical specialties and non-medical disciplines, e.g. educational and social services
- Competence in appraising and using evidence-based treatment
- Receive continued medical education and training in the management of children and adolescents with GD.

B. Allied Health Professionals (Clinical Psychologists, Medical Social Workers) and Others

The psychosocial assessment and treatment of children presenting with symptoms suggestive of gender dysphoria should be undertaken by a professional who has:

- Training in their respective fields of expertise
- Ability to undertake or refer for appropriate treatment
- Ability to psychosocially assess the person's understanding of, and social conditions that can impact gender identity
- Receives continued medical education and training in the management of GD in children

C. Professional Attitude and Behaviour

- Professionals should be aware of their own socio-cultural and religious biases and how these may impact their services
- If a professional and the patient/patient's family cannot agree on therapy goals despite open and in-depth discussions, a second opinion may be sought. However, frequent changes of clinicians may be detrimental to the child's well-being
- Professionals should first and foremost work in the interests of the patient
- Professionals should not dismiss or express a negative attitude towards nonconforming gender identities or symptoms suggestive of gender dysphoria. Neither should professionals prematurely or excessively endorse and affirm a child's gender identity without due assessment and evaluation
- Professionals should deliver the session in a manner appropriate to the developmental and intellectual abilities of the child and family
- Professionals should have a basic understanding of this population and their needs, and interact in a respectful manner
- Professionals should have continuing professional education in the area and practise in an evidence-based manner
- Professionals should plan to develop a long-term relationship with the child and family, with plans for continuing assessment and support
- Professionals should work across disciplines and outside healthcare to support the patient and family

2. INITIAL ASSESSMENT AND CONSULTATION

A. Assessment for Gender Dysphoria

Prepubertal children may not possess the necessary mental capacity to make informed decisions about choices pertaining to GD. Consequently, that responsibility would lie with parents who would in turn be advised by the multidisciplinary team comprising specialists such as psychiatrists, psychologists, family therapists, endocrinologists and even surgeons. As opposed to many western countries where gender care services are often allied health-led, medical clinicians such as psychiatrists are likely to lead such assessment teams in Singapore due to existing professional licensing and practice models in local medical institutions.

There should be joint consultations with the child and parent/assigned caregiver over a period of time. It is imperative that clinical consultations are part of a collaborative decision-making process with special attention to the minority stress model (Meyer, 2003) and presence of comorbid mental illnesses. This process may take place minimally over a period of 6 months to 1 year, depending on the clinical needs and level of understanding of both child and caregivers. These clinical sessions to assess GD should look at the child's psychosocial, cognitive, emotional and neurodevelopmental needs, in order to understand the complete

clinical picture and context behind the expressed gender dysphoric symptoms (Berg & Edwards-Leeper, 2018; Srinath et al., 2019). Unlike adolescents and adults, there are presently no standardised assessment tools or rating scales for GD in children.

Assessment of children should be a regular process due to potential changes as the child grows, and should be conducted using a developmentally appropriate approach. Trained child psychiatrists and allied health workers need to look out for comorbid mental health conditions, including but not limited to mood disorders, anxiety disorders and other neurodevelopmental conditions such as attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD).

Assessment techniques should prioritise the child's comfort, language skills and means of expression. It is imperative to consider environmental, developmental and/or emotional factors (American Psychological Association, 2015; Kaufman & Tishelman, 2018; Malpas et al., 2018) that may constrain the child's ability to properly express their gender diversity, or the parent's ability to report on the child's gender diversity. It is also important to consider factors which may influence belief systems related to gender (Riggs & Bartholomaeus, 2018), and factors which may influence a child's comfort and/or ability to discuss gender identity and other related issues. Parental or caregiver reactions and responses (e.g. punishment) should be taken into account (Srinath et al., 2019). Factors which may constrain family members' comfort or ability in free expression include family conflicts or dynamics, pressure from extended family, as well as other cultural and religious influences (Riggs & Bartholomaeus, 2018).

Family and Systemic Approach

- I. Healthcare professionals need to consider the environmental systems of the patient and related interactions to ensure a holistic assessment. A continuous comprehensive assessment of child's biological and psychosocial well-being is essential as the child's concerns will evolve across the treatment period. Hence, healthcare professionals' assessment and treatment approach may differ according to child's concerns and needs over time.
- II. Immediate environmental systems in which children live in affect them in the most direct manner. Such settings include child's family, peers, school and neighbourhood. As the child interacts with these settings daily, assessments of the relationship between child and immediate environmental systems are crucial. The level of family and peer acceptance, as well as the child's disclosing experience to them could impact the child's mental well-being and treatment journey. Acceptance and inclusiveness within the environment, such as involvement with local community resources, also affects the child's level of outward disclosure (such as mannerisms and attire).
- III. Relationships between social settings in which the child does not have an active role are also important. These include existing legislations, religious systems, and/or

education systems. As Singapore is a multicultural country, healthcare professionals will need to be sensitive to existing cultural and religious values towards gender minorities and should develop a clear understanding of the child's needs and support system while discussing social transitioning with the child.

B. Assessment and/or Treatment of Psychiatric Comorbidity

Children with GD are more likely to experience psychological difficulties than their peers, possibly due to these children experiencing trauma, maltreatment and negative interactions related to non-acceptance of the gender identity (Coleman et al., 2022). A more intensive approach may be required when their presentation is complicated by existing comorbid psychological conditions, autism spectrum disorders, learning or behavioural difficulties, trauma, abuse or significantly impaired family functioning.

Comorbid psychiatric diagnoses, a history of self-harm and suicidal ideation might be found commonly in children with GD compared to their peers (Kozłowska et al., 2021). Internalising disorders, such as depression and anxiety, are found more commonly in this population (Olson et al., 2016). The presence of GD may also be associated with conditions such as separation anxiety (Santarossa et al., 2019). One study reported that 6.4% of children with GD also had autism spectrum disorder (de Vries et al., 2010). It is to be noted that the expression of gender diversity in children with autism spectrum disorder may differ from their peers and that these children may have unique communication styles, varied interpretations of their experiences and clinical needs (Coleman et al., 2022).

Hence, psychiatric conditions such as depression, anxiety disorders and autism spectrum disorders need to be evaluated for when assessing children with GD. Treatment for these comorbid disorders should also be evidence-based and follow a comprehensive biological, psychological and social approach.

C. Relevant Domains for Assessment

A multi-informant, multiperspective approach should be employed in the assessment of children with GD. Gender-related issues should be explored in the broader context of the child and the environment. This allows for a more complete understanding of the factors relating to well-being, sources of support and risk. An understanding of strengths and challenges relating to child, family and environment should be sought (Berg & Edwards-Leeper, 2018; Hendricks & Testa, 2012; Kaufman & Tishelman, 2018; Tishelman & Neumann-Mascis, 2018). In assessing children presenting with GD, multiple assessment domains should be considered. Relevant domains of assessment include:

1. The child's asserted gender identity and gender expression (currently and historically).
2. Evidence of GD and incongruence, with resultant distress and impairment of functioning.

3. Strengths and challenges related to beliefs and attitudes about gender diversity of child, family, peers and others.
4. Child and family experiences of gender minority stress and rejection, hostility or both, due to the child's gender diversity.
5. Level of support related to gender diversity in social contexts (e.g. school, faith community, extended family).
6. Degree of conflict regarding the child's gender-diversity and/or concerning behaviour of parent/caregiver/sibling related to the child's gender-diversity.
7. Child's mental health, communication skills and/or cognitive strengths and challenges, neurodivergence profile, and/or behavioural challenges that can contribute to significant functional difficulty.
8. Relevant medical and developmental history of child and family.
9. Risk concerns, such as exposure to violence, maltreatment, trauma, victimisation by peers, and suicidality.
10. Family stressors which could impact on family acceptance, adjustments, and outcomes.

Information from multiple sources should be elicited and integrated. These sources include the child, parents and other caregivers, siblings, extended family members, school personnel, other healthcare providers, and the broader community, in cultural and legal contexts (Berg & Edwards-Leeper, 2018; Srinath et al., 2019). Methods of information gathering (Berg & Edwards-Leeper, 2018) may include interviews with the child, family members and others (e.g. teachers' observation of the child and the family, and other assessment avenues such as worksheets, self-portraits, family drawings).

Assessment techniques should prioritise the child's comfort, language skills and means of expression (Berg & Edwards-Leeper, 2018; Srinath et al., 2019). Relevant developmental factors in terms of neurocognitive differences (e.g. autism spectrum conditions), and receptive and expressive language skills should be considered. Assessors should consult with specialists for guidance if they do not possess the specialised skills themselves (Strang et al., 2021).

3. PSYCHOSOCIAL INTERVENTION

The primary intervention focuses on psychosocial and psychological support for children experiencing GD. When a child experiences distress or concerns (Barrow & Apostle, 2018) about their gender, it can be helpful and appropriate to seek psychosocial intervention to reduce distress and improve the child's well-being (American Psychological Association, 2015; Craig & Austin, 2016; Malpas et al., 2018). The intervention should be conducted in an appropriate setting and involve the child and the family. Other community agencies and services which are involved with the child and the family may be consulted and involved. The child and family members may be seen individually or in smaller groupings separately as

necessary (McLaughlin & Sharp, 2018; Pullen Sansfaçon et al., 2019; Spivey & Edwards-Leeper, 2019). Older children should be offered individual sessions.

A. Aims and Focus of Psychosocial Therapy

The aim of therapy would be to provide psychological support of the child with gender dysphoria, address any concurrent mental health problems and facilitate the families to provide a supportive response to the concerns and distress of their child.

The focus of therapy with the child may include the following:

- Therapy for concurrent mental health problems.
- Addressing problems and stresses in the child's environment: peer relationships, school functioning, problems with bullying, and stigma against GD.
- Facilitating open conversations and continued exploration of gender identity and gender expression.
- Providing a non-judgmental and safe environment for child and family to explore the various issues, concerns and distress associated with conditions and interventions.

B. Family and Systemic Approach

Family, parents and caregivers of the child with GD may require support to develop knowledge, build understanding and support their child (American Psychological Association, 2015; Ehrensaft, 2018; Malpas et al., 2018; Spivey & Edwards-Leeper, 2019). Focus therapy using a family and systemic approach may include the following:

- Addressing problems and stresses in the child's environment: peer relationships, school functioning, problems with bullying and stigma against GD.
- Addressing and aiding problem-solving for family stresses.
- Improving family relationships and communications.
- Provision of information to child and family about GD with current and future treatment options.
- Facilitating further conversations within the family on various topics: cultural and religious beliefs, gender identity and gender expression, the impact of the child's GD on the family and extended family (telling other relatives, managing the reactions of others), support needed by the child, views and decision-making on social transitioning.
- Providing information about the variety of outcomes for GD in a child and helping families navigate the ambiguity of the outcome.
- Supporting parents to allow the child freedom to return to a gender identity that aligns with sex assigned at birth.

- Supporting parents in various areas: distress over their child’s dysphoria, distress over the lack of support or stigma faced, uncertainty over their own decisions for the child, navigating conflict that arises between themselves and the child.

C. Social Transitioning

There is currently no conclusive evidence on whether children should undertake social transitioning or not. Children with GD can differ in their views and wishes about social transitioning. Social transitioning is associated with persistence of dysphoria from childhood to adolescence (Ehrensaft et al., 2018). It is not clear if it is a contributory factor to the persistence or merely an indicator of intense GD, which tends to persist.

Family members may differ in their views and acceptance of social transitioning, and the extent to which it is carried out. Families should be encouraged to have an open conversation about the implications of decisions on social transitioning.

Where families oppose their child’s wish for social transitioning, professionals may facilitate continuing conversations that may include further provision of information about social transition and helping families find a middle ground (e.g. limited to certain behaviours or situations). Medical professionals should continue to assist parents with supporting their child’s varied needs and help to ensure that the child has ample opportunities to explore gender identity and expression in a safe environment.

Where families are supportive of child’s wish for social transitioning, professionals may facilitate conversations about the support needed e.g. the use of pronouns, explaining and advocating for the child to other adults and outside of home.

4. MEDICAL INTERVENTION

Medical interventions should not be carried out in prepubertal children with GD. This is because about 85% of prepubertal children with a childhood diagnosis of GD/gender incongruence did not remain GD/gender incongruent in adolescence (Steensma et al., 2013), and there are currently no criteria to identify the GD/gender-incongruent children to whom this applies (Hembree et al., 2017).

Monitoring and assessment of the child’s psychosocial functioning is recommended with psychosocial intervention and psychological support as the mainstay of management for children with GD. Treatment with gonadotropin releasing hormone analogues (GnRHa) should not be carried out or be made available as a routine treatment for children with GD (NICE, 2020). In the NICE guidelines evidence review, there was limited short-term and long-term safety data for GnRHa, as well as a lack of statistically significant difference in GD, mental health, body image and psychosocial functioning outcomes in children treated with GnRHa. Withholding GnRHa treatment thus allows for the developmental trajectory of gender

identity to unfold without pursuing or encouraging a specific outcome and the avoidance of potential irreversible impacts.

Most children with GD do not have an underlying medical disorder (Hou et al., 2021). Therefore, referral to a paediatric endocrinologist is not routinely required unless a disorder of sexual development (DSD) is suspected.

In this set of treatment guidelines, use of cross-sex hormones and gender-affirming surgeries including sex reassignment surgeries are not applicable to prepubertal children and hence are not discussed here. Readers are advised to refer to the adolescent set of treatment guidelines.

5. MANAGEMENT OF CHILDREN APPROACHING ADOLESCENCE

When working with children with GD, it is important for professionals to adopt a lifespan developmental approach. Professionals should consider the impact of adolescence on the child with GD and engage them in preparation for adolescence especially when their gender-diversity persists as they approach puberty. A consideration of the history of the child's understanding and views of gender identity and gender expression through the early prepubertal years is important. Ongoing assessment can also be initiated regarding the capacity of the child to understand treatment options that may be offered later at puberty. This process should be discussed with the child and family as the child approaches puberty.

When the child approaches adolescence, there should be a timely and smooth transition to adolescent psychiatric services for continuity of care and longer-term follow ups when necessary.

V. ACKNOWLEDGEMENTS

The following are the members of the Workgroup to develop Gender Dysphoria Treatment Guidelines for Children.

Members			Designation
1	Chairman	Adj A/Prof Ong Say How	Chief & Senior Consultant, Department of Developmental Psychiatry, IMH
2	Deputy Chair	Adj A/Prof Chan Yoke Hwee	Chairman, Medical Board, KKH
3	Member	Dr Donovan Lim	Senior Consultant, Department of Developmental Psychiatry, IMH
4	Member	Dr Chee Tji Tjian	Consultant, Department of Psychological Medicine, NUH
5	Member	Dr Ganesh Kudva	Consultant, Department of Psychological Medicine, NUH
6	Member	Dr Cheryl Loh	Specialist, Garden Grove Clinic, Mount Alvernia Medical Centre
7	Member	Dr Timothy Quek	Head & Senior Consultant, Department of Endocrinology, TTSH
8	Member	Dr Andrew Sng	Consultant, Division of Paediatric Endocrinology, NUH
9	Member	Dr Sadhana Nadarajah	Senior Consultant, Department of Reproductive Medicine, KKH
10	Member	Dr Nau'shil Kaur Randhawa	Consultant, Department of Obstetrics and Gynaecology, NUH
11	Member	Dr Yong Tze Tien	Head & Senior Consultant, Department of Obstetrics & Gynaecology, SGH
12	Lead Secretariat	Dr Goh Tze Jui	Principal Clinical Psychologist, IMH
13	Member	Ms Tan Chen Kee	Deputy Director- General of Education (Schools) & Director of Schools, MOE
14	Member	Ms Carmen Chew	Clinical Psychologist, IMH
15	Member	Ms Doreen Loh	Senior MSW, IMH
16	Member	Ms Christine Chua	Senior MSW, KKH
17	Member	Ms Chua Wan Zhi	Senior MSW, NUH

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Annex 1. Tanner Staging

Boys – Development of External Genitalia

Stage 1 (Prepubertal)	Prepubertal
Stage 2	Enlargement of scrotum and testes; scrotum skin reddens and changes in texture
Stage 3	Enlargement of penis (length at first); further growth of testes
Stage 4	Increased size of penis with growth in breadth and development of glans; testes and scrotum larger, scrotum skin darker
Stage 5	Mature male genitalia

Girls – Breast Development

Stage 1 (Prepubertal)	No breast buds
Stage 2	Breast bud stage with elevation of breast and papilla; enlargement of areola
Stage 3	Further enlargement of breast and areola; no separation of their contour
Stage 4	Areola and papilla form a secondary mound above level of breast
Stage 5	Mature stage: projection of papilla only, related to recession of areola

Boys and Girls – Pubic Hair

Stage 1 (Prepubertal)	Prepubertal, may be some vellus hair
Stage 2	Sparse growth of long, slightly pigmented hair, straight or curled, at base of penis or along labia
Stage 3	Darker, coarser and more curled hair and begins to extend laterally
Stage 4	Hair adult in type, but covering smaller area than in adult; no spread to medial surface of thighs
Stage 5	Pubic hair has distribution of inverted triangle with spread to thighs

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