Document 5
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Gender Recognition Act Evidence

Aim: to see what research there is on when children who say that they have gender dysphoria remain of that view

Where gender is referred to in this paper, this is the person's biological gender as assigned at birth.

Summary

A quick scan of published literature shows that there are ***serious data limitations*** in this area. The limited clinical population of children with gender dysphoria means that there are also limited research findings. In addition such studies will not pick up children who are not know to clinical services, (retrospective studies with transgender adults suggest that two-thirds did not confide in anyone before age 18). In addition retrospective studies with transgender adults cannot answer the question of persistence of gender dysphoria from childhood into adulthood. Reviews looking at persistence rates have found higher rates of persistence in studies after 2000, compared to before 2000, and suggest that children may have been included in earlier studies who would now not meet the formal diagnosis criteria for GD, and that the inclusion of these less extreme cases in earlier studies contributes to the lower persistence rates in earlier studies.

However from the literature it is possible to say the following:

- ***Age of onset -*** of gender dysphoria happens at a young age, between the ages of around 5-8, with three quarters knowing before they leave primary school and only 4% saying after the age of 18.
- Prevalence is hard to estimate, and is likely to be under-estimated if based solely on those accessing medical help – self-report/parental report studies in the Netherlands show for children, parents reported 1.4% of boys and 2% of girls "wishes to be opposite sex", whilst in a population of 15-70 year olds 0.6% of men and 0.2% of women reported an ambivalent or incongruent gender identity.
- ***Persistence*** **-** A review of prospective follow up studies, suggests, only 15.8% of children persist with feelings of gender dysphoria into adolescence, whilst another study found that for approximately 80% of children who have experienced gender dysphoria, symptoms will not persist into adulthood. However another study suggested that the more extreme the gender dysphoria was in childhood the more likely it was that it would persist into adolescence. And Di Cegli et al (2002) conclude that *"There is considerable evidence that, contrary to common belief, these children do not ' grow out of it' and problems tend to increase with the onset of puberty and adolescence."*
- ***Different experience by gender*** – More boys than girls are referred to gender identity clinics. However, findings from studies based on the Child

Behaviour Checklist indicate that gender dysphoria is more prominent in girls than boys. Girls tend to be referred at a later age, explanations for this include that "tomboyish" behaviour in girls is seen as more socially acceptable than "sissy" behaviour in boys, and it is not until bodily changes in puberty, begin to cause a girl distress, that it is seen as an issue. Girls were also more likely than boys to experience depression and to express dislike of their bodies.

- ***Different experience by age*** – those age 12 and over/who have reached puberty, tend to experience more distress, to be more likely to dislike their body, more likely to be depressed and more likely to self-harm or attempt suicide, have relationship/social problems, and have a higher number of associated clinical features than younger children. Physical changes to the body during puberty are thought to intensify the distress experienced.
- ***Lack of vocabulary to articulate experience*** – One study found that transgender children did not learn the vocabulary of words like "transgender" until an average of 15.4 years, leaving an average gap of 7.5 years between becoming aware of being gender variant and learning any words to describe it. This lack of vocabulary increased feelings of social isolation and being the "only one".
- ***The case for early intervention*** – support is required to mitigate the increase in distress and risk associated with puberty
- ***Suggested appropriate interventions*** include:
    - Social interventions and support for relationships/supporting parents
    - Schools and education
    - Interventions to minimise distress and risk
- ***The case for exercising caution in intervening early*** – one study cautioned against taking social steps towards transitioning before puberty, as this can make it hard for the child to revert back to their original gender role
- ***Key factors to help explain the persistence or desistance*** of gender dysphoria emerge around ages 10-13 and are –
    1. Changes in social roles – the widening of the social distance between girls and boys at this time and gender roles becoming more distinct,
    2. The anticipation of/or actual physical changes to the body as a result of puberty, and
    3. The first experiences of falling in love and discovering their sexual identity.

Background:

Gender dysphoria (GD) is when a person has a gender identity which does not match their biological identity.

Currently it is a classifiable mental disorder, which to meet the clinical criteria must cause the person significant distress or difficulties in social or occupational functioning. A mental health practitioner must first diagnose the condition before

physical interventions will be considered. However there is opposition to diagnosing GD in pre-pubescent children, due to the stigmatising effects of having a mental disorder (Ristori and Streensma 2016).

Kennedy and Hellen's research (2010) speaks of "apparent" and "non-apparent" transgender children, and says that the ***vast majority of transgender children will be "non-apparent" in that they will conceal and suppress their gender identity***, and internalise feelings of shame and blame, whilst experiencing isolation about being "different".

Age of onset of gender dysphoria

- Gregor says that there is no set age range for onset of gender dysphoria, and that ***children as young as two*** can present with cross-gender behaviour, and that as soon as children are able to communicate verbally, there are reports of children expressing dissatisfaction with their gender identity.
- Retrospective studies suggest that the majority of adults who self-define a gender-variant realised that they were different ***before the age of 13*** (Kennedy & Hellen 2010; Riley et al.2013, in Gregor 2014).
- Kennedy's 2008 study[1] found that the ***average age at which people became aware that they were transgender was 8.*** (in Kennedy & Hellen 2010)
- More than ***80%*** of transgender people were aware that they were transgender ***before leaving primary school***. (Kennedy 2008, in Kennedy & Hellen 2010)
- Another study by Kennedy & Hellen (2010)[2] reinforces this, and found that the average age at which people could remember their gender identity feeling at variance with that assigned at birth was **7.9 years old**.
- There was a spike in realising that gender identity and biological identity do not match at age ***5,*** with more participants choosing age 5 for realising this, than any other age. (Kennedy & Hellen 2010)
- Only **4%** said that they were first aware of their gender variance at age ***18 or later.*** (Kennedy & Hellen 2010)
- ***76%*** said they were aware ***before leaving primary school*** (Kennedy & Hellen 2010)
- Kennedy & Hellen (2010) note that it is significant that the two studies, with different methods produced such similar results, which they believe adds weight to their validity.
- Interviews with adolescents who had been referred to a gender identity clinic as children found, that in early childhood, around age 5, most were indifferent to their gender identity, but that this changed at ***around age 6/7, where young people started to identify with the other sex, wish to be the other***

[1] Based on analysis from an online artefact

[2] Kennedy & Hellen (2010) ran an online survey in the UK in 2009 with transgender adults, asking for their memories of their childhood. 121 people took part: 103 of whom were assigned male at birth, 11 assigned female at birth, 3 not assigned a gender and 4 who did not say. The age range of participants was 18-65, with the majority in the 36-45 age group.

sex, and feel uncomfortable with their biological sex. Kennedy & Hellen (2010)

Childhood and adolescent gender dysphoria persisting into adolescence and adulthood.

- A review, summarised the findings of 10 prospective follow up studies, which together reported on 317 gender nonconforming children followed up in adolescence or early adulthood. In **85.2% of cases (270 out of 317) the gender dysphoric feelings remitted around or after puberty** (see table 1) (Ristori and Streensma 2016)

Table 1 Persistence Rate: Follow up studies in children with GD (10 studies)

Study	Sample	Age at follow up (range)	Persistence rate
Balkwin (1968) Lebovitz (1972) Zuger (1984) Money & Russo (1979) Davenport (1986) Kosky (1987)	55 natal boys	(13-36)	9% (5 out of 55)
Green (1987)	44 natal boys	19 (14-24)	2% (1 out of 44)
Drummond et. Al (2008)	25 natal girls	25 (15-37)	12% (3 out of 25)
Wallien & Cohen-Kettenis (2008)	40 natal boys 14 natal girls	19 (16-28)	39% (21 out of 54)
Singh (2012)	139 natal boys	21 (13-39)	12% (17 out of 139)

- Ristori and Streensma (2016) found much **variability in persistence rates across studies from 2% to 39%**.
- **Persistence rates were much lower in studies before 2000** than after 2000. Three possible reasons were given for this:
    - The intensity of GD in the children included in studies differs. Lower persistence rates in earlier studies might be due to the inclusion of children who would now not meet the required clinical criteria for inclusion (prior to the publication of DSM III in1980 there was no formal diagnosis for GD in children)
    - Possible cultural differences in referral. Persistence rates are higher in studies in the Netherlands than in Canada. The ratio of boys referred to girls referred is higher in Canada than in the Netherlands. The authors therefore suggest that femininity of boys might be seen as more problematic in Canada in the Netherlands, which might result in more

boys being referred with less extreme GD than those in the Netherlands, leading to higher persistence rates in the Netherlands.

- The timing of follow up varies across studies. A longer follow up time, at a later age might report higher persistence follow up rates. Of the 150 first childhood cases (age 5-12) in Amsterdam, 40 out of 150 re-entered the clinic during adolescence (age 12-18) and turned out to be persisters (26.7%). Checking files for the adult clinic, another 5 applied for treatment after the age of 18, raising the persistence rate to 30%, and showing the importance of long term follow up.

- Wallien & Cohen-Kettenis (2008) showed that the persistence rate is generally higher for natal girls than natal boys
- A summary of the outcomes of young people with gender dysphoria from 11 studies[3] **concludes that 60-90% are not transgender as adults**, they are more likely to identify as gay or lesbian, rather than trans. (See table 2 below, In the table, "cis-" means non-transsexual.)

Table 2 Summary of outcomes from 11 studies

Group and outcome	Study
Gay 2/16 (13%) trans-/crossdress 4/16 (25%) straight/uncertain 10/16 (63%)	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
Trans 2/16- (13%) uncertain 2/16 (13%) gay 12/16 (75%)	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19,* 363–369.
Trans 0/9- (0%) Gay 9/9 (100%)	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
trans-/crossdress 2/45 (4%) uncertain 10/45 (22%) gay 33/45 (73%)	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
trans- 1/10 (10%) gay 2/10 (20%) uncertain 3/10 (30%) straight 4/10 (40%)	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
trans- 1/44 (2%) cis- 43/4 (98%)	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality*. New Haven, CT: Yale University Press.
trans- 0/8 (0%) cis- 8/8 (100%)	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
Trans 21/54 (39%) cis- 33/54 (61%)	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
trans- 3/25 (12%) lesbian/bi- 6/25 (24%) straight 16/25 (64%)	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44,* 34–45.

[3] 11 January 2016 - Do trans- kids stay trans- when they grow up? http://www.sexologytoday.org/2016/01/do-trans-kids-stay-trans-when-they-grow_99.html

trans- 17/139 (12%) cis-122/130 (88%)	Singh, D. (2012). *A follow-up study of boys with gender identity disorder.* Unpublished doctoral dissertation, University of Toronto.
trans- 47/127 (37%) cis- 80/127 (63%)	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.

- A review of prospective follow-up studies by Steensma et al. (2010) suggests that ***only 15.8% of children persist with feelings of gender dysphoria into adolescence***. (39 out of 246 children) (Persistence rates varied from 2% to 27% across the various studies). *"the results unequivocally showed that gender dysphoria remitted after puberty in the vast majority of children."*
- Studies by Drummond et al. (2008) and Wallien & Cohen-Kettenis (2008) further suggest that ***for approximately 80% of children who have experienced gender dysphoria, symptoms will not persist into adulthood***.
- However the ***more extreme the gender dysphoria was in childhood the more likely it was that it would persist into adolescence***. (Wallien & Cohen-Kettenis 2008 in Steensma et al. 2010, and Ristori and Streensma 2016))
- In a qualitative follow up study, of the 53 children under the age of 12 who were referred to the Gender Identity Clinic at the Amsterdam VU University Medical Centre, 29 ***(55%) reapplied to the gender identity clinic as adolescents between the ages of 12-14*** to request medical treatment (sex reassignment by means of hormone treatment and surgery). 24 (45%) did not reapply, leading the authors to infer that they no longer had gender dysphoric feelings, and no longer wanted sex reassignment.
- "After the onset of puberty, it is considered that the likelihood that GD will persist into adulthood is high. Indeed in three Dutch clinical follow up studies of adolescents, who after comprehensive psycho-diagnostic assessment, received puberty suppression and/or cross-gender hormones, none of the participating adolescents refrained from gender affirming surgery after they had started pubertal suppression (GnRH agonists) or cross-gender hormones."(in Leibowitz and de Vries 2016)

Prevalence -

- ***Number of cases*** – it is hard to estimate the number of cases, as "apparent transgender" children are relatively rare, the majority will be concealing their gender identity. Research by Kennedy & Hellen (2010) suggests that up to two-thirds of young people with gender dysphoria do not disclose their feelings to anyone until after the age of 18 years. Even then, they do not

necessarily tell their parent, and often the response they received was negative. Only 31% told anyone before the age of 18.

- The prevalence of GD is not as yet known, but the current proposed numbers are likely underestimated. Prevalence studies are complicated by several confounding factors and results may be misleading (Lopez X.; Stewart S.; Jacobson-Dickman E 2016)
- Epidemiological data from several countries indicate that gender dysphoria in children and adolescents is far more common than initially anticipated. This is in line with the currently observed steady increase in referrals to gender clinics. (Fuss, Johannes; Auer, Matthias K.; Briken, Peer,2015)
- Between January 2000 and January 2007, 198 children under the age of 12 were referred to the Gender Identity Clinic at the Amsterdam VU University Medical Centre.

Prevalence estimates for children and young people from various studies indicate GD in only a small percentage of children (from Kuyper &Wijsen 2014):

- A Dutch study found parents said "behaves like opposite sex" for 2.6% of boys and 5% of girls, and "***wishes to be opposite sex" for 1.4% of boys and 2% of girls.*** (based on studies using the Child Behaviour Checklist (CBCL), a parent report questionnaire on behavioural problems, which includes 2 items relating to gender variance" behaves like opposite sex" and "wishes to be opposite sex". (Verhust, van der Ende & Koot 1996 in Ristori and Streensma 2016). This was similar to findings in another Dutch study and a North American study.
- A large scale twin study using CBLC (as above) found: at ***age 7, 3.7% of boys and 5.7% of girls behaved like the opposite sex and/or wishes to the opposite sex. By age 10, this fell to 2.7% and 3.6% respectively*** (Van Beijsterveldt 2006)
- A study of US boys and girls (age 4-11) found 4.8% of boys and 10.6% of girls behaved like the opposite sex, and ***1.0% of boys and 3.5% of girls wished to be the opposite sex.*** (Zucker et al 1997)
- A study of 5010 first year college students from the National Taiwan University found ***7.3% of female and 1.9% of male students reported that they (very) often wished to be of the opposite sex*** (using 1 item of the Adult Self Report Inventory-4 (ASRI-4) "I wish I was of the opposite sex") (Lai et al 2010)
- Using the same question with 760 Dutch 11-18 year olds, ***5% of boys and 8.4% of girls indicated that they wanted to be of the opposite sex*** (5.2% & 8.2% respectively, "a bit or sometimes" and 0.0 and 0.2% respectively "clearly or often") (Tick, van der Ende and Verhulst 2008)
- Self-identification as transgender amongst a sample of 2,730 young people in grades 6-8 in San Francisco Public Schools found that ***1.3% identified as***

transgender, when presented with a transgender-inclusive item on gender ("What is your gender (female; male; transgender)?" (Shields et al 2013)

- The studies using the CBCL (by Van Beijsterveldt 2006 & Zucker et al 1997) found that parents indicating "opposite sex behaviour" as "somewhat or sometimes true" greatly outnumbered the parents who said it was "very true or often true". Both studies also found higher rates of children behaving like the opposite sex than wishing to be of the opposite sex.

Prevalence estimates for adults (from Kuyper &Wijsen 2014):

- **In Scotland, in 1998** (Wilson et. al 1999) a survey was sent out to senior managers of all general practices in Scotland to find out about experience of patients with gender dysphoria: defined as a subjective experience of incongruity between genital anatomy and gender identity. Responses were received from 73% of practices. The prevalence of gender dysphoria among patients aged over 15 years was calculated as **8.18 per 100 000, with an approximate sex ratio of 4:1 in favour of male-to-female patients.**
    - A total of 273 patients with gender dysphoria were identified,. Among these patients:
    - 66 (24%) were patients with gender dysphoria but not in treatment
    - 47 (17%) were patients with gender dysphoria in psychological/ counselling treatment only
    - 65 (24%) were undergoing hormonal treatment, but pre-operative,
    - and 95 (35%) had undergone gender reassignment surgery
- In the Netherlands in 1993, the prevalence of transsexualism was estimated as 1:11,900 for male-to-female (MtF) and 1:30,400 for female-to-male (FtM) (based on the number of individuals starting hormone treatment at the largest gender identity clinic in the Netherlands)
- In Sweden in 2003, there was an annual incidence of 0.32 per 100,000 MtF and 0.19 per 100,00 for FtM (based on the figures seeking permission from the National Board of Health and Welfare to change their name, or sex (assigned at birth) or desiring sex reassignment surgery (SRS)
- In Germany in 2009, there was an annual prevalence rate of 0.41 per 100,000 for MtF and 0.26 per 100,000 for FtM (using same method as in Sweden, above)
- In Belgium in 2007, estimated prevalence was 1 per 12,900 MtF and 1 per 33,800 FtM (based on numbers who underwent SRS at Belgium gender identity clinics or with plastic surgeons
- Prevalence figures based on those seeking medical treatment for GD are likely to under- estimate, as individuals might be hesitant to seek medical care. A Dutch study of 8,064 people aged 15 -70, looked at self-reported gender identity and gender dysphoria, based on 3 measure of GD. 1) gender

identity, 2) dislike of natal female/male body, and 3) the wish to obtain hormones/sex-reassignment surgery. Results found 4.6% of natal men and 3.2% of natal women reported an ambivalent gender identity (equal identification with other sex as with sex assigned at birth), and 1.1% of natal men and 0.8% of natal women reported an incongruent gender identity (stronger identification with other sex than with sex assigned at birth). Lower percentages reported a dislike of their natal body and/or a wish for hormones/surgery. ***Combining these figures the estimated number of men reporting an ambivalent or incongruent gender identity combined with a dislike of their male body, and a wish to obtain hormones/surgery was 0.6%. For women it was 0.2%.*** (Kuyper and Wijsen, 2014) .

- Looking in more detail at figures from that study – individuals reporting an ***ambivalent*** gender identity, were more often natal men, more often have a lower instead of a higher education, were twice as likely to report a non-Western ethnic background, and were more than twice as likely to be bisexual or homosexual instead of heterosexual.
- Those with an ***incongruen***t gender identity, did not differ sociodemographically from individuals who did not report such identities, except that they were more likely to be homosexual or bisexual
- Within the sub-sample of natal men (n= 218) and natal women(n = 161) who reported an ambivalent or incongruent gender identity only around a fifth reported an accompanying dislike of the physical features of sex at birth (22.9% for men and 21.7% for women, and only half, or fewer of those who did report a dislike of their physical characteristics reported wanting hormones or surgery to affirm their experienced gender (50.8% for natal men and 28.6% for natal women)
- Kuyper and Wijsen, (2014) believe these findings confirm the idea that prevalence rates based on the number of individuals seeking medical help is likely to be an underestimate; that they demonstrate the diversity in the experience of GD, and that a GD diagnosis does not necessarily lead to the need for SRS.
- They found that men were much more likely than women to want hormone treatment or SRS (0.6& vs. 0,25), and believe that this might be due to society's tolerance for cross-gender behaviours, where masculine women might be more accepted than feminine men, and therefore find it easier to adopt a male gender expression without hormones or surgery.

Difference in Prevalence estimates for young people and adults

Kuyper and Wijsen, (2014) note that self-report, or parental-report for YP results in higher estimates than for adults, and that self/parental reports for YP could be seen as the upper limit to prevalence rates, estimates based on those accessing health care services can be seen as the lower limit.

- YP self-report/parental report might over-estimate GD as it is based on the behavioural (behaves like the opposite sex)and the cognitive (wishes to the be the opposite sex) elements of GD, and excludes the affective element (e.g. the feelings of distress caused by the incongruence between gender identity and sex as assigned at birth)
- However prevalence estimates based on those seeking medical or legal assistance, are likely to be an under-estimate, with issues such as stigma, shame, financial barriers, lack of social support, risk of social disruption such as losing job or family or partner all having the potential to act as barriers to individuals seeking medical help or legal recognition for their chosen gender.
- They also note that basing estimates on those seeking surgery (SRS) or hormone therapy might underestimate the prevalence as they are based on a dichotomous perspective, and do not take into account those who have ambivalent or non-binary gender identities, who may dislike their natal sexual characteristics but not want SRS.

Characteristics of young people with gender dysphoria

- Whilst boys are more likely to be referred to gender identity clinics, findings from studies based on the Child Behaviour Checklist indicate that gender dysphoria is more prominent in girls than boys. 5% of girls "behave like the opposite sex" compared to 2.6% of boys, and 2% of girls "wish to be the opposite sex" compared to 1.4% of boys.
- In recent years the sex ratios of clinic referrals have gradually changed, showing less of a difference between referrals for boys and girls. Before 2000 the ratio between boys and girls was 5.75 to 1 in Canada and 2.93 to 1 in the Netherlands. Between 2008-2011, these ratios had decreased to 3.4 to 1 in Canada and 1.68 to 1 in the Netherlands. This was driven by a reduction in referrals for boys, which might indicate an increase in tolerance of gender nonconforming behaviours (Ristori and Streensma 2016).
- A recent study of sex ratios in referrals for adolescents (as opposed to children) found an inversion of the sex ratio and ***higher referral rates amongst adolescent girls than boys*** (looking at combined referral rates from Toronto and Amsterdam clinics of 747 adolescents between 2006 and 2013). (Aitken et a, 2015 in Leibowitz and de Vries (2016)) and note that this happened in the context of increased adolescent referrals. Interestingly the authors proposed explanation for this, differs from that suggested by Ristori and Streensma (above) whilst Ristori and Streensma saw a decrease in referrals for boys as an indication of an increasing tolerance of gender non-conforming behaviours, Aitken et al suggest that it is the disproportionality higher stigma faced by natal boys compared to natal girls that stops them seeking medical intervention, and it is easier for natal girls to come out and seek transition.

- In recent years, there has been a ***marked increase in adolescent referrals*** (compared to children) to gender identity clinics, and in a Toronto study, the number of adolescent referrals was higher than the number of child referrals for the first time in the 2008-2011 cohort, since they began collecting data in 1976. (Wood et. al. 2013 in Leibowitz and de Vries 2016). The authors suggest that this increase might be due to increasing access to the internet and social media meaning that adolescents are now better able to put a name to their experience, and have an increased awareness that treatment options exist.
- Studies show variable results relating to the sexual orientation of young people with GD, with some studies showing them being predominantly attracted to people of their natal sex, and other studies showing them predominantly attracted to people of the opposite sex to their natal sex (Leibowitz and de Vries 2016)

Di Cegli et al (2002) carried out a retrospective analysis of case notes of the first 124 cases seen by a London-based specialist gender identity service for young people, since 1989.

Age data was split by under 12, and 12 years and over (age 12 being taken as a rough approximation for reaching puberty)

- ***Age -*** Whilst the mean referral age of the sample was 11, there were slightly more over 12s than under 12s, 69 vs. 55
- ***Gender -*** Overall there were twice the number of boys referred as girls (66 vs. 32) (as well as 2 intersex young people)
- In the under-12 age group there were nearly four times as many boys referred as girls (76 vs. 20), a ratio of nearly four to one, however in the 12s and over the ratio was four to three, with 60 boys compared to 40 girls. Girls made up 20% of the under 12 referrals and 40% of the 12s and overs.
- The proportion of girls is higher in this UK study than in North American samples, here the ratio was 2 boys to 1 girls, US studies show ratios of 6:1 or 5:1, indicating that prevalence in the UK might be higher amongst girls or lower amongst boys than in North America.

- ***Differences in experience by gender:***
    - One of the reasons for more girls being referred later (age 12 and over) might be that "tomboyish" behaviour is not necessarily a cause for concern in Western cultures, but with the onset of puberty, girls' distress about the development of their body might become more intense. (Di Cegli et al, 2002)
    - This is backed up by Kennedy & Hellen (2010) who found that transgender children born female, may be less likely to face social exclusion at such a young age, as those born male, as girls acting in a

"tomboyish" manner is more socially acceptable pre-puberty, than a boy acting in a "sissy" manner.
    - Kennedy & Hellen (2010) also found that amongst girls 18% were allowed to express their gender identity at primary school and 10% at secondary school, and 45% at home. This contrasts with only 2% of males at school and 4% of males at home. Boys were more likely to express their gender identity in secret, such as secretly cross-dressing, when no one else is around.
    - "Dislike of bodily sexual characteristics" is much higher for girls (65%) than for boys 37%. (Di Cegli et al, 2002)
    - Depression is also more common in girls, two thirds (65%) of girls compared to one third (31%) of boys experienced depression. (Di Cegli et al, 2002)
- ***Ethnicity*** - Data on ethnicity was not systematically collected, but it appears that people from the Indian sub-continent may be over-represented. 79% of recorded ethnicities were white, 6% Indian, 6% Pakistani, and 1% Bangladeshi. 1% were Black Caribbean and 7% other. (Di Cegli et al, 2002)
- ***Family background*** :
    - Just over a quarter (27%) of referrals had spent time in care
    - Nearly half (48%) had experienced living with a single parent
    - And 42% experienced the loss of one or both parents through death or separation
    - Under half (41%) were unaffected by any of these three factors (Di Cegli et al, 2002)

The Experience of Gender Dysphoria pre and post puberty and the case for early intervention

- On the basis of strong evidence from retrospective studies of relevant populations, clinicians should be especially vigilant in identifying GD in patients who are peripubertal because the onset of puberty heightens the risk of depression, anxiety, self-destructive choices, and suicide. Lopez X.; Stewart S.; Jacobson-Dickman E (2016)

  Looking at a range of clinical features, differences can be seen between the under 12 and 12 and over group:

  - ***"Dislike of bodily sexual characteristics" is significantly higher in the 12s and overs*** with over half of 12 and overs (55%) feeling this compared to one third (32%) of under 12s, this feeling increases with puberty as the body changes and develops. (Di Cegli et al, 2002) Steensma et al. (2010) also found that physical changes around puberty led to feelings of disgust and self-hatred with their bodies.
  - ***Depression and self-harming behaviours are also more common in the older age group*** than the younger age group. Over half (52%) of over 12s

suffer from depression/misery compared to a quarter (26%) of under 12s. Around a quarter of 12 and overs have self-harmed/overdosed (23%) compared to none of the under 12s and 22% have engaged in self-injurious behaviour, compared to 2% of under 12s. (Di Cegli et al, 2002)

- ***Adolescents may conform more to social gender norms than younger children, however this would appear to come at the cost of experiencing more distress.*** For example in the under 12s not wearing stereotypically gendered clothes is a very predominant feature (90% for boys and 82% in girls), this drops to 61% for both genders in the 12 and over group, however the older group experience an increase in distress, with the proportion experiencing depression increasing from 26% to 52%. (Di Cegli et al, 2002) *"with the onset of puberty, adolescents begin to conform more to gender roles in public areas of social life; but that this is counterbalanced by increasing problems with family relationships, avoidance of school and peers, increased depression and hence suicide risk*" (Di Cegli et al, 2002).
- A ***higher mean number of associated clinical features*** was found in the 12s and overs (13.5 compared to 8.1) *"suggesting that* ***the transition to adolescence is particularly troubled for this group.*** *This has an obvious relevance for management, as clinicians, families and social agencies will need to be alerted to the increasing difficulties brought about by adolescence and devise interventions to prevent these undesirable developments."* (Di Cegli et al, 2002)
- Despite being aware of their gender variance from an early age, young people were on average ***15.4 years old, before they had the vocabulary to express this*** (e.g. awareness of words such as 'transgender', 'transsexual' or 'cross-dresser'). This leaves an ***average gap of 7.5 years between becoming aware of being gender variant and learning any words to describe it.*** This lack of vocabulary can ***increase feelings of isolation*** and 'being the only one'. By the time they find the words, they may have lived more than half their lives knowing that they were transgender, whilst not knowing any words to express this (The age of acquisition of this vocabulary has decreased over the last half century, those at school in the 1950's and '60's were unlikely to acquire it until their 20s, whilst those attending school in the 70's, 80's and 90's were likely to have acquired it around age 14.) (Kennedy & Hellen 2010)
- The vocabulary relating to transgender tends to be acquired from a variety of mass media sources – if these words are discovered in a context where transgender people are being eroticised, objectified or ridiculed, this could have negative impacts on the child's self-esteem.
- *"Yet it appears that schools fail to support transgender children even to the extent of tacitly permitting, ignoring, or indeed participating in bullying which forces them to conceal or supress these identities."* Transgender children feel forced to conform and as a result of denying their true identities, the *"resulting*

psychological problems appear to manifest themselves well into adulthood." Kennedy & Hellen (2010)

- ***Changes that occur between the ages of 10-13 are seen to be significant***, both for those who "persist" and who "desist" with gender dysphoria. These include 3 key factors: ***1) certain changes in social roles – the widening of the social distance between girls and boys at this time and gender roles becoming more distinct, 2) the anticipation of/or actual physical changes to the body as a result of puberty, and 3) the first experiences of falling in love and discovering their sexual identity***. (Steensma et al. 2010).

Di Cegli et al (2002) found that:

"Gender identity problems have wide-reaching implications for children and their families and problems may become more entrenched with the onset of puberty. Although specialist support and coordination of services becomes essential particularly at this time, ***interventions in childhood may have the function of preventing difficulties becoming more severe during adolescence."***

They also note that:

"*the data would suggest that* ***children with gender identity disorder ideally require specialist support before puberty to avoid some of the distress caused by the development of secondary sexual characteristics during puberty."***

And:

"The high rates of depression in boys and girls and the significantly greater incidence of depression and self-harm in the older age group suggests that gender identity disorder ***represents a high suicide risk and again indicates the importance of specialist treatment and support before, during and following puberty.***

And:

"the results for case complexity suggest ***either that puberty may lead to an increasing complexity of problems or that cases become more complex the later they are referred to the service owing to lack of intervention and management before puberty***."

They conclude that:

"There is considerable evidence that, contrary to common belief, these children do not ' grow out of it' and problems tend to increase with the onset of puberty and adolescence."

Types of intervention/support which might be appropriate pre-puberty

Best clinical practice for children with GD is controversial and widely debated amongst professionals. There is limited empirical evidence in favour of a particular

treatment. There is no "one size fits all approach, and different kinds of treatment options should be available to meet the unique needs of each individual child. (Ristori and Streensma 2016). The focus should be on minimising the child's distress around their GD. It is generally agreed that there should be no medical intervention in childhood (pre-puberty).

An "affirmative" model was defined by Hidalgo et al 2013 (in Leibowitz and de Vries (2016)) as one that "does not view a transgender identity as inherently pathological and that a person should be supported by their clinician to live in the gender that feels most comfortable to them."

Ristori and Streensma (2016) outline 3 approaches to treating DG children

1. Working to lessen the cross-gender behaviour and identification – this approach is now **considered unethical** by the World Professional Association for Transgender Health (WPATH) and many other international professional organisations. It tends to have overall unsatisfactory results and children can become distressed if their preferences and/or behaviours are blocked.
2. "watchful waiting" – dealing with the potential social risks for the child, allowing the progress of the GD in the child to "unfold in a natural way". The focus is on encouraging the child and parents to find a balance between accepting and supporting the GD, whilst at the same time protecting the child against any negative reactions, and remaining realistic about the chances that GD feelings might desist in future. It's about giving the child space to explore their GD feelings, whilst keeping all future options open.
3. Affirming the trans identity and supporting the child to transition socially – helping them to build a positive self-identity and gender resilience. The rationale for supporting a social transition is that the child can revert back to their original assigned gender, as the change has been purely social, not medical. However critics of this approach are concerned that children who have doubts about their new gender might persist, in order to avoid a potentially difficult second social transition back to their original gender.

This is in line with recommendations from The World Professional Association for Transgender Health WPATH on the psychological treatment of YP with GD[4]:who say

[4] **The World Professional Association for Transgender Health (WPATH), Standards of Care document**, https://s3.amazonaws.com/amo_hub_content/Association140/files/Standards%20of%20Care%20V7%20-%202011%20WPATH%20(2)(1).pdf

Psychological intervention (p15)

- Mental health professionals should help families to have an accepting and nurturing response to the concerns of their gender dysphoric child or adolescent
- Psychotherapy should focus on reducing a child's or adolescent's distress related to the gender dysphoria and on ameliorating any other psychosocial difficulties
- Treatment aimed at trying to change a person's gender identity and expression to become more congruent with sex assigned at birth has been attempted in the past without success (Gelder & Marks, 1969; Greenson, 1964), particularly in the long term (Cohen-Kettenis & Kuiper, 1984; Pauly, 1965). Such treatment is no longer considered ethical.

On the basis of strong evidence, "reparative psychotherapy" is both unsuccessful and psychologically deleterious. On the basis of expert consensus, the "gender affirmative model" is more accepted.. Lopez X.; Stewart S.; Jacobson-Dickman E (2016)

Social interventions and support for relationships/supporting parents

- Supporting social transitions for YP - WPATH say this is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood. Further research is required to inform future clinical recommendations.
- Di Cegli et al (2002) call for a multi-disciplinary approach to supporting these young people and their families and providing them with long term support *"Interventions involving the social network (e.g. school, family support groups) are often necessary given the relationship difficulties that this audit has highlighted"*
- Support for parents on how to react/support their children - Some parents "police gender choices", encouraging stereotypical gender behaviours and discouraging cross-gender behaviour. However this can have a negative impact, and lead to increases in self-harm and suicidal ideation. (Hill in Gregor)
- Steensma et al recommend that before the age of 10, a "cautious attitude" is taken towards the moment of transition. Parents should be supported to realise "the unpredictability of their child's psychosexual outcome", and should be encouraged to be supportive of their child, without taking social steps towards transition that the child might find hard to reverse.

Schools and education

- Kennedy & Hellen (2010) conclude that: *"Consequently, it is recommended that as a minimum, schools introduce children to the concept of transgender*

people, so that transgender children are able to feel they are not alone and that their gender identity is as valid as any other. This would also encourage other children to become more accepting of transgender people."

Interventions to minimise distress and risk

- Anticipated and actual physical changes around puberty can increase distress, and efforts should be made to manage this early.

The argument for not intervening early

- Steensma et al. (2010) found that amongst female "desisters", those who had dressed/behaved like a boy in childhood, but wanted to return to a more feminine gender identity post-puberty found this difficult, as they feared teasing for going back to their original gender role. They also felt shame at their previous boyish experience and wanted to have a "fresh start" at high school, which was not always possible if children from their primary school were still with them and told others of their past. As such, they caution against taking "social steps" to transition long before puberty which are hard to reverse.

Factors which might influence the persistence or remittance of gender dysphoria into adolescence

Ristori and Streensma (2016) report that:

- The more intense the GD in childhood and the more cross-gendered behaviour there is, the higher the chance that GD will persist.
- Wallien & Cohen-Kettenis (2008) showed that the persistence rate is generally higher for natal girls than natal boys
- The assessment age in usually higher for persisters than desisters
- Singh (2012) reported higher parental social class in desisters than persisters
- Social transition , especially in natal boys was predictive of the persistence of GD.

Steensma et al. 2010 carried out qualitative research with 25 adolescents who had been referred to a Dutch gender identity clinic as children. Of these, 14 (7 boys and 7 girls) were identified as "persisters" had further contact with the clinic as adolescents, seeking sex change treatment and 11 (6 boys and 5 girls) were classed as "desisters", no further contact with the clinic in adolescence.

A key difference between the persisters and desisters appears to be that those who persist "*attributed their gender dysphoria primarily to the discrepancy between their body and their gender identity and a true longing for having a different body.*" Desisters, however were more likely to attribute their desire to be of a different sex to

fulfil a preferred gender role, rather than having an aversion to their own body. Steensma et al conclude that ***"These accounts imply that the presence of body discomfort may contribute significantly to the persistence of desistance of childhood gender dysphoria."*** However they do caution that some of this might be down to biased recall, and those who desist, might minimise their experience due to feelings of shame, whilst those who persist, might infer these feelings in childhood because they experienced them intensely later on.

Changes that occur between the ages of 10-13 are seen to be significant, both for those who "persist" and who "desist" with gender dysphoria. These include 3 key factors:

1) certain changes in social roles – the widening of the social distance between girls and boys at this time and gender roles becoming more distinct,

<u>For persisters</u>

- This led to increasing discomfort in the social roles of their assigned gender
- Classmates, who had been indifferent to or supportive of the gender variant behaviour in earlier childhood became more critical or questioning of it

<u>For desisters</u>

- Whilst their interest in atypical gender interests continued, they also developed more interest in activities more typical to their gender, and therefore formed more affinity and friendships with children of their own gender

2) the anticipation of/or actual physical changes to the body as a result of puberty,

<u>For persisters</u>

- Anticipated or actual physical changes (such as developing breasts for girls, or developing Adam's apples and facial hair for boys) were described as "often agonizing and highly distressful" and *"both boys and girls indicated that thinking about their bodies developing in the 'wrong' direction generated destructive thoughts and created or intensified feelings of aversion towards their bodies."*
- Feelings of aversion, disgust and hatred towards their bodies led to adolescents feeling insecure and social withdrawal, and resulted in a strong desire for medical treatment such as hormone treatment and surgery.

<u>For desisters</u>

- Girls initially reported feeling uncomfortable with the growth of their breasts, feeling embarrassed and uncomfortable to begin with, however soon they began to feel more positive about these changes, and wanted to become more physically feminine.
- Boys reported the physical changes as positive and pleasurable, as they explored their male bodies.

3) the first experiences of falling in love and discovering their sexual identity.

For persisters

- All persisters in this study felt attracted to people of the same biological sex as themselves, and saw this as confirmation of their chosen gender identity as they did not see themselves as homosexual or lesbian, but as heterosexual attraction from their chosen gender identity.
- However *"the discrepancy between their body and their gender identity made them anxious about coming too close to others emotionally and physically."*

For desisters

- The girls all felt attracted to boys, which made them question their "masculine" feelings, and weakened their cross-gender identification.
- Boys were attracted to girls, boys or both, but regardless of their sexual orientation *"the boys' experience of falling in love almost always resulted in a decrease of cross-gender feelings, as it emphasised their feelings of being a boy."*

Impacts of childhood/adolescent gender dysphoria

- De Ceglie et al found that the most common associated features were relationship difficulty with parents/carers (57%), relationship difficulty with peers (52%), depression/misery (42%), family mental health problems (38%), family physical health problems (38%), harassment/persecution victim (33%), and social sensitivity (31%).
- Kennedy & Hellen (2010) state that the majority of transgender children feel the need to hide their gender identity, and supress it, internalising feelings of guilt and shame, and believing that they are the problem.. They also speak of isolation, with transgender children believing that they are the only one, feeling different and feeling fear that they will suffer socially if they tell anyone.
- This internalising of societal expectations to conform to gender norms, and concealing their true feelings has a wide range of negative impacts on transgender children. These include achieving below their abilities at school, leaving school early, self-harm, attempted suicide and being more likely so suffer from mental health issues in early adulthood. (Whittle et al 2007 in Kennedy & Hellen 2010). Psychological problems caused by feeling forced to

conform in childhood continue to manifest themselves well into adulthood. (In contrast Steensma et al. (2010) reported that in the Netherlands, most of the participants in their small study found that peers and parents were supportive of the "coming out" process of being transgender.)

Limitations around existing evidence

There are quite major data limitations in this area. Studies with transgender children are likely to represent the tip of the ice berg, those who are known to services, but there may be many more children who are not being picked up in services or studies. In addition retrospective studies with transgender adults will not shed light on whether or not gender dysphoria persists from childhood into adult hood as the sample consists entirely of those who do identify as transgender as adults. In addition, differences can be noted depending on the country in which the studies are conducted, UK studies found a higher proportion of girls than North American studies, whilst a Dutch study found childhood peers of gender dysphoric children to be generally supportive, in stark contrast to a UK study, which found such children lived in shame and fear of social ostracisation as a result of their gender divergence.

A literature review by Gregor (2014) indicates that there may be number of reasons why it is hard to estimate the prevalence of young people with gender dysphoria and the likelihood of this carrying on into adulthood.

- "*Given the limited clinical population of children with gender identity issues, there are also equally limited research findings."*
- Children who are not brought to the attention of specialized clinics, do not feature in studies, meaning there might be a higher prevalence of children with gender dysphoria than studies suggest
- "Apparent transgender" children are relatively rare, the majority will be concealing their gender identity. Research by Kennedy & Hellen (2010) suggests that up to two-thirds of young people with gender dysphoria do not disclose their feelings to anyone until after the age of 18 years. Even then, they do not necessarily tell their parent, and often the response they received was negative. Only 31% told anyone before the age of 18.

Kennedy & Hellen (2010) also say that a review by Minter in 1999 calls into question the validity of some of the previous research with transgender children, claiming that much of the research was carried out by mental health professionals *"to legitimise the 'prevention' or 'elimination' of what is judged socially unacceptable gender-transgressive behaviour."*

As with Gregor, they also question the validity of the selection of the participants, as they are all children who have been referred for treatment by their parents.

Kennedy & Hellen (2010) carried out a retrospective online survey with transgender adults, looking back on their experience as children. They did this for a number of reasons, which also highlight some of the limitations of carrying out research with transgender children:

- It is inappropriate to collect this information directly from children, as children become aware of their gender identities at different times. Therefore, by carrying out retrospective research, a complete representative picture will not be available for a generation until they become adults.
- There would be ethical considerations obtaining data from children, who may not be "out" to their parents
- Sampling of transgender children is likely to be unrepresentative as it will be skewed towards "apparent transgender" children, who they argue are the minority.

Retrospective studies might suffer from "biased recall". E.g. Steensma et al (2010) caution that how people feel now might colour how they report on the past. So some who desist from gender dysphoria, might minimise their childhood experience due to feelings of shame, whilst those who persist, might infer strong feelings in childhood because they experienced them intensely later on.

Di Cegli et al (2002) also note limitations in the data they used, which was extracted retrospectively from case files, meaning that:

- Any information not contained in the case files would not be known
- And little was known about the timing of specific events which might help to identify common risk factors (e.g. loss or separation

When looking at persistence rates across studies Ristori and Streensma (2016) found high variability in persistence (2%-39%). They also found higher rates of persistence in studies after 2000, compared to before 2000, and suggest that children may have been included in earlier studies who would now not meet the formal diagnosis criteria for GD, and that the inclusion of these less extreme cases in earlier studies contributes to the lower persistence rates in earlier studies. They say that those included in recent studies consist of "clinically referred samples" which was not the case in earlier studies. E.g. they cite the study by Green (1987), where a sample of "feminine boys" was recruited through advertisement. This study recorded the lowest persistent rate (2%). Therefore like is not always being compared with like in these studies.

Kuyper and Wijsen, (2014), in their study amongst the general Dutch population, noted the low response of 20.9% as the main limitation, limiting the generalizability of their findings.

Kuyper and Wijsen's findings,(2014) also add weight to the argument that basing prevalence rates of GD on those seeking medical help is likely to be an

underestimate. In their general population study they found that only 50% of men and 28.6% of women who reported having both an incongruent or ambivalent gender identity and a dislike of their physical characteristics associated with their sex, wanted hormones or surgery to reaffirm their chosen gender, and as such may be unknown to medical professionals.

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