Gender Mainstreaming
Part 1: The LGBTQ+ movement and gender dysphoria

There are many definitions of public health. Whatever definition is preferred, it cannot be free from politics (1). However, regardless of what political leaning is favored, the 'health of the people' must be the first priority.

The LGBTQ+ movement was mentioned in this blog in recent entries, mentioning the adverse effects on the health of women (2, 3). The letter 'T' stands for transgender women (born as a boy) and transgender men (girl at birth) and could endanger the health and well-being not only of adults but also children, adolescents, and young adults, being under the impression of suffering from gender dysphoria, influenced to 'transfer' into the opposite sex.

How gender mainstreaming came along

Gender Mainstreaming is a political agenda. In the beginning was an attempt for equal rights for women and made its way after being mentioned in the final statement of the World Women's Conference 1995 in Beijing (4). In what is known as the Amsterdam Treaty, among other major agreements, Gender Mainstreaming became obligatory for the European Union (5). What initially aimed to equalize the social and financial standing of women against men was finally adapted into the main political strategies, mainly in Western countries.

Transgender individuals in the population

Estimating the proportion of transgender individuals in a given country is difficult. To imagine a dimension, an attempt was made for 19 states of the USA using the CDC's Behavioral Risk Factor Surveillance System (BRFFS) with an identity question in 2014 (6). Of all adults over 18 years old, 0.6% identified as transgender; a similar proportion is estimated also of the group of 25 to 64 years old. The two groups with a higher proportion of 0.7% are aged 13 to 17 and 18 to 24 years. The lowest proportion, with 0.5%, was projected for those aged 65 and older. The implications of hormone application and the transformation of men and females through gender operations are discussed in the following entry. However, one of the primary attacks of gender mainstreaming is directed at children and adolescents. An introduction to the sexual development of children is turned into a gender pamphlet guiding the unaware reader into the gender mainstream world (7).

Development of sexuality up to adolescents

How much one looks into sex variations in the mammalian animal world (8), the fact remains that home sapiens are born either as a boy or as a girl (2), and only the very rare disease of 46, XY disorder, makes it difficult to decide whether the newborn is a girl or a boy (9). Born into one of the two sexes determines differences in genetics, hormones, and physical appearance. Around the age of two, most children realize the differences between the sexes, and around the third birthday, they know that they are a boy or a girl, and by age four, they identify themselves according to their sex (7).

The final development of sexuality occurs during adolescence, a Latin word for 'to grow up.' The developmental period could be separated into three phases. Between the tenth and the 13th year, sex-determined physical changes take place, and the children are concerned about their body appearance. During the middle (14 to 16 years) and the late (17 to 19 years) stage of adolescence, the gonadal hormones, cortisol, and a wide range of sex-determined hormones through neuro-endocrinal stimulus cause puberty. The biological and psychological changes accompany cognitive developments, abstract thinking, and reasoning. During late adolescence, social involvement, peer interaction, and sexual interest evolve. The very substantial changes are very stressful for adolescents. In the early phase, behavioral experimentation is expected. In middle adolescence, the attitude of taking risks of various kinds appears, and during the later phase, the assessment of their own risk takes place (10).

Puberty, the critical phase in adolescence

To help guide the teenagers through these stages of development should be the task of the parents, and in case of severe difficulties of child and youth psychiatry and psychotherapy (10). Several other specialties are also involved, such as pediatrics, neurology, and eccrinology, not to mention medicine and sociology. However, who steps in to advise, who, and what method should be used to help the youngsters is disputed.

Gender dysphoria and puberty blockers

Among the academic field, sociology is one driving force in the Gender Mainstream. One of the most favored models to explain sexual development is the 'bio-social' model (11, 12), suitable to be included through 'pediatric gender medicine' (13) as 'gender dysphoria' into the LGBTQ+ movement. In this context, the demand for curing 'gender dysphoria' is emphasized. One of the leading pharmaceutical means for intervention is using gonadotrophin-releasing hormone antagonists (GnRHa).

GnRHa inhibits estrogen and androgen synthesis and was previously used in the clinic, for instance, as therapy for advanced prostate cancer and puberty appearing too early. It is used now for gender dysphoria with a variety of different commercial releases (14). Gender Affirming Hormone 'treatment' with Puberty Blockers GNRHa could be started at the age of 8 to 13 for females and 9 to 14 for males. So-called gender-affirming hormones, with the understanding that they 'reduce the suffering of feeling that the body doesn't match their internal and true gender,' which is opposite to the sex born in. The antagonists, therefore, work against the growing penis, growth of facial and body hair, prevent voice deepening, and the broad shoulders of boys and girls growing breasts and menstruation. Before the application can be made, consultations by sexual medicine specialists, pediatricians, and child and adolescent psychiatrists are necessary. Individuals requesting those pharmaceutical products must be 19 years old; otherwise, parental consent is required (15). The request for 'Gender affirming' procedures seem to be limited in Thailand, mainly because of the high costs and the still not so powerful influence of the LGBTQ+ movement. This is different in the USA and countries in the European Union (16, 17).

Gender dysphoria increases

In Finland, it was found that gender dysphoria from 2013/2014 increased from 318 to 326 males in 2017, and within the same period, from 401 to 701 female youth (18). In the USA, this trend continued at larger dimensions. From 2017 to 2021, gender dysphoria increased from 15.172 to 42.172. Puberty blocker injections rose from 633 to 1.390 children. It is estimated that in the last five years, the group of 6 years to 17 years old amounted to 121.882 children and adolescents (19). An online commentary on the rising increase of gender dysphoria and adolescent transgender added another figure to the use of puberty blockers, with 17.683 users in the last five years (17).

Why does gender dysphoria increase?

As documented in the USA, before 2025, the government supported push of gender activists toward children and adolescents, glued to their mobiles, the most important 'social contagion,' convinced about their exceptionality personality, following the myth of self-empowerment trying to realize the idea that they are living in the wrong body and to change that, especially when facing severe problems in the family, in school or with their peers, obviously has an impact (11). For Thailand, some time ago, it was cited that about 4% of Thai boys and 14% of Thai girls between 10 and 12 years of age were not content with their gender (probably meaning sex). The girls didn't like to be females, which goes along with 'physical constraints,' while the boys didn't want to behave as males in the way society expects from them (20). Probably, the high costs for gender transformation with puberty blockers and transforming operations still limit cases being cared for because of gender dysphoria.

Gender dysphoria is expressed more by girls than boys

As estimated for Thailand and mentioned above for Finland, girls, in particular, are prone to appear to feel the need to change their gender (18). In Sweden, 13 to 17-year-old girls with gender dysphoria increased over 10 years by 1500% (11), and in the UK, young females with gender dysphoria increased 70 times from 2009 to 2016 (21). In comparison to boys, especially the physiological changes, such as menstruation and enlargement of the breasts, could be very stressful. The significant alteration of the female organism from the child to the adult woman orchestrated by genes and hormones should be given special attention when nature is artificially challenged for otherwise healthy individuals (22). It pointed out that the effect of 'gender-affirming treatments' by no means is well known, given the very complex interaction of the neuroendocrine regulation of fertility. A short overview of how fertility evolves should be frightening while comprehending of what the 'therapy' is dealing with.

The biological system ensuring reproduction

A key factor in the initiation of puberty is the hormone kisspeptin. It controls the gonadal-releasing hormone (GnRH) through the hypothalamic-pituitary-gonadal axis (HPG). Kisspeptin neurons in the brain are located in the arcuate nucleus (ARC), expressing neurokinin B (NKB) and dynorphin (Dyn). The system of both kinins, named KNDy neurons, is involved in the positive and negative feedback of estrogen and GnRH secretion. Through this follicle development, oocyte maturation and ovulation are initiated (23). The system's complexity is further aggravated in that it is linked to the 24-hour inherent circadian rhythms, so it might be

that the effect of intervention relates to the time it is administered, as suggested for chronotherapy (24).

Puberty suppression and what might happen

Puberty suppression early at puberty, when stopped, usually returns to normal sexual development. This might not be the case while undergoing a longer period of suppression. The effects on height, body weight, bone mineral density, and reproductive 'functions' are of concern (25). Throughout the active application of GnRH agonists, mood swings and vaginal bleeding might be observed. For male adolescents not content with their sex, who went on puberty blockers for quite some time, it might result in hypogonadism, decreased muscle mass, and increased fat, as well as facing problems with penis erection (22). Hormone therapy with testosterone for females might cause polycystic-like ovaries and atrophy and proliferation of the endometrium. Still, more evidence about the effects on the ovary, endometrium, and fertility is necessary (26). A Reuters report states that for youth seeking gender-affirming care, their families 'must make decisions about life-altering treatments that have little scientific evidence of their long-term safety and efficacy' (17).

Gender Mainstream internationally highly controversial

Gender mainstream and gender dysphoria as such are highly controversial and discussed. Gender Mainstream, as one of the political agendas in the USA and the European Union, pushed forward with the battle cry that 'sex is a social construct' seems to be one of the political agendas causing a deep rupture of the society. At the forefront of the dispute are the pros and cons of transgender women and men. The LGBTQ+ movement claims that those suffering from wrong gender identities that 'differ from society's expectations based on sex assigned at birth' have all the rights for intervention supporting gender affirmation (27, 28). Arguments point out that scientific studies have assured the benefit of medical intervention in supporting gender transformation. Especially concerning gender dysphoria, this is seriously questioned.

Medical societies in France, Australia, and New Zealand warn to take the medication too early. The National Health Service England is quoted as saying that independent reviews of gender identity services came up with 'scare and inconclusive evidence to support clinical decision making' (13).

In the United States, healthcare laws and policies for transgender youth vary significantly between states (29). In Sweden, the National Board of Health and Welfare concluded that the risks of puberty blockers and treatment with hormones outweigh the possible benefits for minors. Finland recommended psychological support over other measures. In both countries, transformative surgery is limited to adults (13). Similarly, Denmark restricted youth gender transition. Gender clinics are no longer allowed to prescribe puberty blockers and hormones. Surgery is not permitted. Instead, therapeutic counseling and support are recommended (30).

In Thailand, looking back for a lifetime, sex and gender were simultaneously used. A liberal attitude to sexual preferences, either to the opposite sex, homosexuality or to like to have sex with one of the same sex as well as the other way round, is accepted.

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