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# Ethical Implications of Treatment for Gender Dysphoria in Youth

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## ABSTRACT

This manuscript explores ethical implications of treatment for youth with diagnosed gender dysphoria. The ethical considerations outlined and analyzed in this essay involve illuminating an understanding of whether the administration of pubertal suppression with GnRH agonists, and cross-sex hormones to children with gender dysphoria is morally justified as treatment to manage their psychological distress, or if safer more understood alternatives exist. This essay emphasizes that as health care professionals, we must ensure youth with gender dysphoria receive adequate medical treatment and care. This essay concludes through extensive literature review, that the use of inconclusive and underresearched methods to manage gender dysphoria cannot be ethically justified and therefore should be re-evaluated.

Keywords: Gender dysphoria, GnRH agonists, Cross-sex hormones, Ethical implications

## ***1. Introduction***

In the past few decades, individuals who self-identify as transgender and many whom may meet the DSM-5 diagnostic criteria for Gender Dysphoria, seem to have revealed their desired identities online and in their physical lives. Online, this is reflected through thousands, of websites, blogs, and discussion groups which provide information about what it means to be transgender, how to access health care, and, social support outlets [24]. In recent years, the number of specialised gender identity clinics have increased rapidly, with new programs established in Australia, Western Europe, North America and other areas, reporting a sharp increase in referral rates [24]. With the rise of these developments, it is appropriate to provide insight into the ethical implications which present when support for these individuals approaches underdeveloped medical treatment.

Gender dysphoria (GD) is a condition that is marked by psychological suffering due to incongruence between an individual's experienced or expressed gender and their biologically assigned sex [4]. The manifestation of GD can be observed during childhood and adolescent development both in the prepubertal and postpubertal stages. In gender dysphoric children and adolescents, puberty initiates the development of undesirable sexual characteristics causing acute suffering due discordance with their biologically assigned sex [4]. Although the prevalence of gender dysphoria, as it is indicated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), remains a relatively uncommon diagnosis, there is sufficient evidence that its prevalence has increased recent decades [24]. In recent years, there has been an increase in referral rates to specialised gender identity clinics, underscoring the rising prevalence of this diagnosis. Recent studies suggest that the prevalence of a self-reported transgender

identity in children, adolescents and adults ranges from 0.5 to 1.3%, markedly higher than prevalence rates based on clinic-referred samples of adults only; emphasizing the increasing prevalence among youth populations [24]. Pubertal suppression with gonadotropin releasing hormone analogs (GnRHa) have been proposed for individuals with GD in the pediatric and adolescent population as a treatment for postponing the pubertal development with the goal to attenuate psychological suffering. Pubertal suppression with GnRH agonists combined with cross-sex hormones in children and adolescents are being considered, and performed in order to decrease the adversities of gender dysphoria in this population.

Children with gender dysphoria experience distress over their gender incongruence and, if they successfully undergo the pubertal development of what they attribute as their incorrect gender, their psychological well-being could deteriorate significantly. Studied children and adolescents in this population develop depression and suicidal ideation, and further may experience alienation, and harassment in their social environments for their inability to be socially accepted in cross-gender sports, restrooms or similar gender specific experiences [5]. Such circumstances may lead to the development of increased psychiatric morbidity. Due to these risks, many medical professionals, family members of gender dysphoric children and society at large feel medical and psychological intervention is appropriate at addressing these concerns.

Gender, is a term coined which refers to the psychological and cultural characteristics associated with biological sex. The term gender is a psychological and sociological concept. Gender dysphoria in pediatric and adolescent cases, may lead to the formation of a transgendered individual. Transgender refers to an individual with a gender identity that does not conform to expectations based on the sex they were assigned at birth. In simplest terms, it is a discordance between gender, identity and sex [1]. Identical twin studies demonstrate these psychological and sociological factors which predominate in the development of gender dysphoria [18]. Family and peer relationships, one's ecological influences and their experiences impact an individual's emotional, social, and psychological development [18]. Studies suggest that social reinforcement, parental psychopathology, family dynamics, and social influence facilitated by various forms of media, all contribute to the development of GD in children [5].

### *1.1 Treatment directions for gender dysphoric youth*

In the past, medicine utilized psychological interventions focusing on aligning the mind with the body, and addressing underlying ideologies or potential misconceptions treating GD as a psychological condition, not a physical one [1]. In recent years, the paradigm has shifted, ideology now stating that the mind is correct, and the body is afflicted, and new interventions focus on aligning the body to what the mind believes by implementing pubertal suppression with GnRH agonists, cross-sex hormones, and sex reassignment surgeries. For children and adolescents with gender dysphoria they may desire such interventions in order to establish an external appearance that more closely aligns with their gender identity. The debate over how to treat children and adolescents

with GD is primarily an ethical dispute, one in which we must consider the guiding ethical principles on which medicine and bioethics rely. Though implementing appropriate interventions for gender dysphoria in the pediatric and adolescent population is certainly paramount, the use of puberty suppression medications, and cross-gender hormone therapy in this population is not ethically acceptable. Conclusive and sufficient evidence of long term safety and evaluation of potential risks such as adverse effects on metabolic and endocrine status, impaired increment of bone mass, and interference with brain development has not met evidence based medicine guidelines, and undermines basic ethical guiding principles.

### *1.2 Typical puberty development in youth*

For a typically developing child, usually around age eleven in biological males and ten in biological females the pituitary gland in the brain releases two hormones- luteinizing hormone and follicle stimulating hormone. When these hormones are produced in higher concentrations they affect the sex glands in the testes (male) and ovaries (female) producing sex hormones testosterone and estrogen respectively [20]. The production of these sex hormones cause the developmental stages in puberty. These stages occur in a series of steps called Tanner Stages 1-5. The Tanner stages present in varied ages depending on the individual, the scale defines physical measurements of development based on external primary and secondary sex characteristics; breasts, genitals, testicular volume and development of pubic hair. In biological males, these stages enable an increase in testicular size, increasing testosterone production, which enable increase pubic hair and phallic size [19]. A typically developing male will grow axillary (armpit) hair and facial hair, and grow taller in height and their voice changes. In biological females, estrogen production allows for breast development, menstrual cycle will begin and females will experience growth of pubic hair, and axillary hair [20].

### *1.3 Mechanism of puberty suppression medication*

Puberty suppression is an agent which inhibits the the release of luteinizing hormone and follicle stimulating hormones from the pituitary gland [7]. Inhibiting these hormone prevents testosterone from being released from the testes, and estrogen from being released from the ovaries. Without exposure to the sex hormones, estrogen and testosterone, children and adolescents of pubertal age will not undergo the physical changes associated with these hormones. Leuprolide or Depot Lupron is a common suppression drug used. They can be injected intramuscularly and given on a monthly or every 3-month basis. Supprelin or Histrelin is an implant version of puberty suppression drug. This device is implanted under the skin and releases the agent over a period of one year.

Puberty suppression medications are used for many different reasons. In some children they have been approved by the Federal Drug Administration (FDA) for treatment of precocious puberty [20], which is a premature onset of puberty. In this case, puberty is only suppressed until a developmentally appropriate age for onset

occurs, then puberty is continued and occurs within typical limits. In adult populations, puberty suppression medications are used for treatment of prostatic carcinoma in males and may be used to treat endometriosis, uterine fibroids, or other female hormone-related problems [7]. These treatment measures, have been extensively researched and trialed for their corresponding population, as a sufficient treatment option to manage otherwise detrimental health conditions [21]. Finally as stated previously, puberty suppression medications are now increasingly used in order to suppress endogenous sex hormone production in pediatric and adolescent populations with gender dysphoria despite minimal longitudinal, clinical and evidence based research [1].

## ***2. The case in favor of puberty suppression and similar medical interventions***

In recent years, there has been an increase in referrals of gender-expansive and transgender children to specialty pediatric centers which offer gender clinics, specific for pediatric and adolescent populations with gender dysphoria or similar gender identity disorders. It is not known whether this is because of increased prevalence or increased recognition or acceptance of transgender communities, and other gender identity related diagnoses. There are now forty gender clinics across the United States that promote the use of pubertal suppression and cross-sex hormones in children and adolescent populations [1]. The rationale for use of puberty suppression is to allow the gender-dysphoric child time to explore gender identity free from the emotional distress triggered by the onset of secondary sex characteristics that typically present in the stages of puberty [8][6].

There is an adequate case in favor of utilizing puberty suppression, and cross gender hormones in order to address the psychological, social, and emotional concerns for children and adolescents faced with gender dysphoria. By suppressing the individual's production of sex hormones, administering cross hormone therapy for transition to desired gender would be more effective [6]. Puberty suppressive drugs usage would effectively inhibit the endogenous pubertal changes that may worsen the individual's gender dysphoria, creating further emotional, social and psychological distress [6]. In fact, those who support the use of such medication indicate that withholding this treatment would be more harmful.

There is evident controversy surrounding suppression of puberty in children with GD, however supporters have compiled minimum evidence in favor of this treatment option. Medical, surgical and psychological interventions are considered to be necessary components in the management of gender dysphoria in the adult population. The goals of medical and surgical treatments are to align the patient's physical appearance to their internal gender identity. Medical treatment involves the administration of cross-sex hormones, surgical interventions such as mastectomies, salpingo-oophorectomies, hysterectomies, creating neophallus and orchiectomies with the creation of a neovagina, which are permanent procedures [7]. In recent years, these efforts have been extending into pediatric and adolescent populations. Adults, children and adolescents alike may choose to undergo only medical treatment or also include surgical interventions in order to function as their desired gender.

In the prepubertal population, there is an additional treatment possibility, the suppression of puberty using continuous gonadotropin-releasing hormone (GnRH) agonists. Those in favor of the utilization of this treatment say the fundamental benefit of this strategy is that children gain time to reflect over their gender identity, without becoming trapped in a body that is experienced as alien [8]. The importance of preventing development of secondary sex characteristics during this period for those who support its usage feel it is detrimental. Supporters claim if children are experiencing considerable distress over their gender incongruence and proceed with natural pubertal development then they are at higher risk for further psychological distress and may be at risk for suicide, self-harm and similar behaviors [10]. Supporters claim that suppressing puberty and allowing children the opportunity to explore their gender identities decrease their risk for suicidal ideation and attempts.

Those who may proceed with a gender transition will have more success in obtaining a more normal and satisfying appearance if puberty is arrested than if they had waited until adulthood to transition [10]. This is because natural effects of puberty such as matured height would be irreversible, or those effects that can be changed (mature breast and mature genital development) would only be reversed through in depth surgical procedures.

Further, youth experiencing gender dysphoria who received treatment via puberty suppression have ample psychosocial outcomes, such as greater comfort with their physical selves therefore resulting in fewer psychological complications. Should youth on puberty suppressive medications decide not to change gender after all, puberty suppressant drugs can be withheld and development restarts as normal [2]. Supporters profess that prepubescent children should be able to receive this treatment as long as the clinician discusses all potential risks and benefits. Indicating that since puberty suppression is the only therapy available for children with GD, those in favor for it's usage consider it unethical to deny this treatment option.

It is currently recommended that treatment be initiated when the patient is in the Tanner II stage of puberty on the basis that during this stage a child has had some experience of his/her biological gender and can therefore make a logical decision [2]. There is data that indicate that children who continue to experience gender dysphoria into early adolescence will maintain a transgender identity, and delaying treatment may cause further psychological effects [2]. Supporters stake their ethical argument on the notion that if allowing puberty to progress appears likely to harm the child then puberty should be suspended. Indicating that it would be unethical to allow a patient to suffer through the distress of natural pubertal development when medicine can combat the distress it causes.

### ***3. The case against puberty suppression and similar medical interventions***

As health care professionals, there is a moral obligation to alleviate suffering—and for pediatric patients with GD, who are undoubtedly suffering, suppression of puberty may present as a plausible possibility to manage this illness, however the evidence based medicine to which medical interventions are founded upon is limited on

this subject, and therefore there is insufficient indication of this method being the safest way to relieve suffering for these individuals.

Of course, it is worthwhile to note that exogenous continuous GnRH administration is the standard of care for the treatment of precocious puberty, and for this population its safety and efficacy has been extensively studied [20]. The circumstances of utilizing GnRH in these populations and in those of young desiring to delay or stop puberty all together, in some case well beyond natural pubertal timelines, is distinguishable. Precocious puberty can be defined as sex hormone production or exposure occurring earlier than the norms for specific gender and racial or ethnic background. Identification of the child with pathological pubertal development allows for accurate diagnosis and application of current treatment strategies, which include to use of GnRHa treatment outlet such a implants, or injections [20]. Recent improvements in therapeutic agents allow for complete suppression of precocious puberty with less discomfort to the patient. Although approved for use by the FDA and pediatric endocrinology associations, there are major gaps in understanding and in the area of long-term outcomes, including endocrine and metabolic effects of precocious puberty [20]. Deficits occur in lack of long-term data on the psychological and behavioral effects of precocious puberty and the effects of GnRHa treatment. However, treatment in these populations suppress puberty only until typical pubertal stages are expected, and in many cases the child will go on to experience normal pubertal progression [20]. On the contrary, children receiving suppression medications during puberty, which is the recommended course of treatment for those with GD, do not typically go on to progress into further stages of puberty. In a review of extensive literature, there is no evidence of any large, randomized, controlled study that documents the alleged benefits and potential harms to gender dysphoric children from pubertal suppression and decades of cross-sex hormone use [22]. Further there seems to be no evidence of any long-term, large, randomized, controlled study which compares the outcomes of various psychotherapeutic interventions for childhood GD with those of pubertal suppression followed by decades of synthetic steroids [22]. In a modern society which attribute pivotal medical successes on the basis of evidence-based medicine, this should give health care practitioners, families, and the society at large a pause.

### *3.1 Evidence based medicine as an ethical implication*

Evidence-based medicine is founded on the idea that decisions about the care of individual patients should involve the “conscientious, explicit and judicious use of current best evidence”[23]. Evidence based medicine is what guides to improvements in knowledge and thereby benefiting the patient’s overall well being. From an ethical perspective, the strongest arguments in support of evidence based medicine are that it allows the best evaluated methods of healthcare as well as potentially harmful methods to be identified and enables patients and doctors to make better informed decisions. If a particular medical procedure or treatment has sufficient evidence which would indicate in almost every circumstance, a positive effect on the patient experiencing the treatment without causing physical, emotional or psychological distress then after extensive clinical trials and further recommendations by prestigious medical research organizations, a medical

procedure or treatment may be considered justified and beneficial. In the case against the use of puberty suppression medication and similar treatments to manage GD in youth, there is no such context to which evidence based practice can be attributed. In an illustrative sense we might consider, a patient who has obvious emotional and psychological distress that requests a medical treatment or procedure which may, or may not relieve distress, the course of action which they are requesting is purely experimental, do we implement this request to honor the patient's desires? This case would be further complicated if the patient was unable to consent fully due to a lack of competence, or an immature neurological presentation. In most circumstances, a provider would halt, ensuring more than adequate risk versus benefit research and sound evidence based literature was evaluated prior to proceeding with a course of action, granted it is ethically justified. It is dangerous and ethically concerning to recommend or provide treatment which involves a minor undergoing medical treatment without the existence of a pathophysiology, and for such reasons it must be considered medical experimentation that does not justify the risk to which youth are exposed. Gender dysphoria is currently the only circumstance in which medical intervention does not cure a sick body, but healthy organs are mutilated in the process of adapting physical and congruent psychological identity.

### *3.2 Risk of harm as an ethical implication*

The claim that puberty-blocking treatments are fully reversible makes them appear less drastic, but this claim is not supported by scientific evidence. As addressed in previous sections, it remains unknown whether or not ordinary sex-typical puberty will resume following the suppression of puberty in patients with gender dysphoria [9]. Additionally, there is evidence which suggests children receiving suppression medications during puberty or prior to puberty do not typically go on to progress into further stages of puberty, altogether disrupting or eliminating natural puberty and replacing it with cross-hormonal therapy [9].

In a study of seventy pre-pubertal candidates that continued on to receive puberty suppression it was documented that all subjects eventually embraced a transgender identity and requested cross-sex hormones [11]. This statistic is alarming. In typical cases of diagnosed GD eighty to ninety five percent of pre-pubertal youth do not persist in their GD. Studies that show one hundred percent of pre-pubertal children who received puberty suppression choose to later initiate treatment with cross-sex hormones suggests that the use of such hormones may inevitably lead the individual to identify as transgender, due to underlying mechanisms which occur within neurological realms. The suppression of puberty prevents further endogenous masculinization or feminization of the brain causing exposed children to be non-conforming. Current recommendations involve the promotion of impersonation of an individual's desired gender while being treated with puberty suppression drugs, inevitably forcing already confused children to take on the role of their non-biological sex [13]. These neurological implications will prevent a youth from identifying as being the biological male or a female they actually are, and could cause for further confusion or distress if they are unable to accurately impersonate the opposite gender. A protocol of pubertal suppression that sets into motion an inevitable outcome of transgender identification

that requires lifelong use of harmful synthetic hormones [12] is neither fully reversible nor harmless.

It is also unclear whether children would be able to develop normal reproductive functions if they were to withdraw from puberty suppression [12]. There is further uncertainty on whether bone and muscle development will proceed normally for these children if they resume puberty as their biological sex. There is additional cause for concern when interfering with pubertal suppression at Tanner Stage 2, followed by the use of cross-sex hormones which will leave these children sterile and without gonadal tissue or gametes available for cryopreservation[12]. Sterilization of humans without medically acceptable and sound justification, is ethically and morally wrong. When an individual is sterilized, even as a secondary outcome of therapy, lacking full, free, and informed consent, it is a violation of international law. The debate on pediatric consent will not be discussed in great detail here, however it is of important ethical consideration to note the implications of sterilizing a child without consent of their matured adult self should be reason to evaluate alternative treatment options.

Other risks of pubertal suppression medications must be considered, and further invalidate the use of these drugs for treatment of youth with gender dysphoria. The GnRH agonists used for pubertal suppression in gender dysphoric children have been discussed in previous sections in detail. In addition to preventing the development of secondary sex characteristics, GnRH agonists have side effects which include arrest in bone growth, decrease bone accretion, prevention of the sex-steroid dependent organization and maturation of the youth brain, and as previously introduced, inhibit fertility by preventing the development of gonadal tissue and mature gametes for the duration of treatment. GnRH agonists prevent the maturation of gonadal tissue and gametes in both sexes, the large percent of youth who desire to initiate treatment using cross-sex hormones will be rendered infertile without any possibility of having genetic offspring in the future because they will lack gonadal tissue and gametes [12]. If guidelines were considered to delay use of puberty suppression medication until older adolescence, or adolescents in later Tanner stages of pubertal development, this may provide an opportunity for them to consider cryopreservation of gametes prior to beginning cross-sex hormones. However this induces the burden and costly interventions of using artificial reproductive technology in order to conceive genetic offspring in the future, which may be especially gruesome in cases where adolescents come to terms with their gender dysphoria after maturation of neurological brain development in the mid-twenties [13]. There have been documented cases of transgender adults who stopped their cross-sex hormones in order to allow their bodies to produce gametes, conceive, and have a child, there is little guarantee that this is a viable option in the long term [12]. Those individuals who undergo sex reassignment surgery and have their reproductive organs removed are rendered permanently infertile [12].

### *3.3 Risk of harm from cross-sex hormones as an ethical implication*

Potential risks from cross-sex hormones to children with GD are based on the adult literature. In adult literature there are potentially long-term safety risks associated

with hormone therapy, many findings have been deemed inconclusive [23]. Children who transition will require these hormones for a significantly greater length of time than their adult counterparts [7]. Due to this they may be more likely to experience physiological morbidities than those researched in adults. Oral estrogen administration to males put them at potential risk for experiencing: thrombosis/thromboembolism; cardiovascular disease; weight gain; hypertriglyceridemia; elevated blood pressure; decreased glucose tolerance; gallbladder disease; prolactinoma; and breast cancer [15]. Females who receive testosterone may be at risk for low HDL and elevated triglycerides; increased homocysteine levels; hepatotoxicity; polycythemia; increased risk of sleep apnea; insulin resistance; and unknown effects on breast, endometrial and ovarian tissues [15]. In addition gender altering surgeries offered after cross-hormone completion carry its own set of irreversible risks.

### *3.4 Beneficence and non-maleficence for ethical consideration*

It is imperative to note the ethical considerations of such risks involved when determining the morality of administering these medication and treatment options to children with gender dysphoria as a way to manage their psychological distress. While it's important to understand these efforts have been established in order to provide solace, and improve the overall psychological status of affected children, we must evaluate whether good intentions correlate to a greater overall good for these youth. Ensuring youth with gender dysphoria receive adequate medical treatment and care is undoubtedly the duty of medical professionals, however how we get to this is of important discussion. In medical ethics, the term beneficence connotes acts of mercy, kindness, and charity. It is understood even more broadly in ethical theory to include effectively all forms of action intended to benefit or promote the good of other persons. The ethical guiding principle of beneficence refers to a normative statement of a moral obligation to act for the others' benefit, helping them to further their important and legitimate interests, often by preventing or removing possible harms. While there is the argument that inducing the evaluated medical treatments would in fact remove the harm of potentially fatal outcomes from increased suicide risks, or remove the harm of further psychological distress there isn't enough evidence to support that proceeding with this course of treatment is the best or safest way to get to the end result. Those in support of this treatment, and those who oppose it have the same end result in mind, a positive, more fulfilling life with little to no psychological distress. The difference lies in how this goal is obtained and putting a youth at risk for many adverse side effects, when other, evidence based practices such as psychological counseling and therapy have been proven to be successful in alleviating distress is not ethically sound. In addition to a moral obligation to beneficence, health care professionals have a moral obligation to non-maleficence. By implementing a treatment with an increase in harmful risks that could substantially harm the receiving patient we are not fulfilling our moral obligation to do no harm and further do an injustice to our patient by neglecting to address the underlying issues for psychological distress that is experienced in youth with gender dysphoria.

### *3.5 Psychological implications for ethical consideration*

Further psychological implications suggest there is a more beneficial treatment for youth facing gender dysphoria that should be considered in place of initiating pubertal suppression treatments and similar methods for care. There is certainly evidence of a social contagion at play for those facing GD. For example, in many communities, there are entire peer groups coming out or being diagnosed with gender dysphoria and identifying as transgender at the same time [14]. Strong consideration should be given to investigating a causal association between adverse childhood events, including sexual abuse, and transgenderism, as addressed in previous sections there is large body of literature documenting many potential causes for the onset of GD [15]. It must be considered possible that some individuals develop GD and later claim a transgender identity as a result of childhood maltreatment and/or sexual abuse. This is an area in need of research, however if it is so then the same approach used similar psychological contexts should be considered, such as intensive psychological therapy and not the use of medical interventions like puberty suppression medications. The American Psychiatric Association (APA), explains in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) that GD is listed therein not due to the discrepancy between the individual's thoughts and physical reality, but due to the presence of emotional distress that hampers social functioning [16]. The DSM-5 states a diagnosis is needed in order for insurance companies to pay for the treatments of discussion (puberty suppression medication) in order to alleviate the emotional distress of GD [16]. In the case of GD proceeding with medical interventions such as GRnH, and cross-hormone therapy are not only emotionally distressing for the individuals but also life-threatening. In this population those who desire surgery or additional extreme medical interventions may very well be relieved of some emotional distress but these procedures will do nothing to address the underlying psychological problem. With many psychological disorders, if underlying issues are left unaddressed there is a risk that the patient will develop worse conditions, or could potentially cause indirect harm by increasing risk for suicide, depression and anxiety. According to the DSM-5, once treatment with these medications or surgical intervention have been induced, and distress is considered alleviated [16], then GD diagnosis is no longer applicable, thereby disengaging funds for the patient to receive therapeutic intervention and potentially posing a risk for further or worsened distress. If we aren't cautious in this regard then the art of psychotherapy will diminish as the field increasingly devolves into potentially unnecessary medical interventions, with the risk of devastating results for patient

It has been standard practice for a physician or psychologist to help an individual to align their thoughts with physical reality. In the case of gender dysphoria, for an individual's gender identity to align with biologic sex. Children with GD do not have a disordered body, although they may feel as they do, it can be assumed in most presentations their body is perfectly healthy. A child's distress over developing secondary sex characteristics does not mean that puberty should be treated as a disease to be halted, but rather a phenomenon in need of further evaluation through psychoanalysis. Up until recent years children presenting with GD were treated with the approach of watchful waiting or pursuit of family and individual psychotherapy [16]. The

goal of therapy, was to address familial conflicts, treat any psychosocial morbidities in the child, and aid the child in aligning gender identity with biological sex [16]. Experts on both sides of the pubertal suppression debate agree that within this context, the majority of children with GD accepted their biological sex by late adolescence (see previous sections for statistics). The increase in utilizing pubertal suppression to treat GD is promoted in order to avoid discrimination, violence, psychopathology, and suicide. Which supporters claim are inevitable consequences if withholding of puberty blockers or cross-sex hormones from a gender dysphoric child occurs. Yet, statistics revealing that eighty to ninety five percent of gender-dysphoric youth emerge physically and psychologically intact after passing through puberty without these interventions refute this claim [1]. With evidence emphasizing the effectiveness of psychotherapy in youth with GD [17], the cornerstone for suicide prevention or psychological distress prevention should be the same for them as for all children facing psychological disorders. That is with early identification and treatment of psychological comorbidities. If other treatment options exist which provide decreased implications and are supported with in depth analysis to be safe and effective in an attempt to preserve, honor and promote the good for human life, then these treatment options must be the standard of care to conflicting treatment options which could result in harm, maleficence and fail to honor the greater good of the patient.

#### ***4. Conclusion***

In closing the ethical considerations outlined and analyzed in this essay involve illuminating an understanding of whether the administering pubertal suppression with GnRH agonists, and cross-sex hormones to children with gender dysphoria are a morally justified treatment to manage their psychological distress, or if safer more understood alternatives exist. The importance of providing treatment options in this population is essential in order to provide solace, and improve the overall psychological status of affected children. The use of pubertal suppression drugs and cross-sex hormones have been considered as a possible treatment option in order to achieve this goal. However, it is crucial that health care professionals understand and consider that good intentions do not indefinitely correlate to a greater overall good for these youth, especially in the case of these interventions. Ensuring youth with gender dysphoria receive adequate medical treatment and care is undoubtedly the duty of medical professionals as indicated in this essay, however the use of inconclusive and under researched methods [17] to manage gender dysphoria cannot be ethically justified and therefore should be re-evaluated.

Providing potentially harmful and ultimately uncertain treatment to our future generation should not be the standard care when there are treatment alternatives available with empirical evidence supporting its effectiveness, such as psychotherapy. Of course implementing appropriate interventions for gender dysphoria in the pediatric and adolescent population is certainly needed, therefore we must continue to treat with proven and safe methods while simultaneously researching more treatment options. The use pubertal suppression with GnRH agonists, and cross-sex hormones in minors may very well be an option in the future, but without more than sufficient and successful

long-term clinical trials [17], conclusive analysis on risk/benefits ratio, appropriate initiation of safety protocols and FDA approval among other administrative recommendations, these treatment methods cannot be utilized in an ethically appropriate manner. Looking at future directions, appropriate longitudinal studies should be performed, with consent and disclosure of the potential risks discussed previously, in order to clarify safety concerns or lack thereof. Conclusive and sufficient evidence of long term safety and evaluation must be performed in order to align with evidence based medicine guidelines, and further considerations such as ensuring minimal harm to the patient both in the present as well as in the future in order to uphold ethical guiding principles which support the overall good for the patient of discussion. From an ethical standpoint it is not morally justified to provide pubertal suppression medications, and cross-sex hormones to minor populations until further evaluation of such methods for treatment are performed instead, we should rely on evidence based and safer methods for treatment such as psychotherapy.

## REFERENCES

1. Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study
2. Giordano S. Lives in a chiaroscuro. Should we suspend the puberty of children with gender identity disorder? *J Med Ethics*. 2008;34(8):580-584.
3. Cohen-Kettenis PT, van Goozen SH. Pubertal delay as an aid in diagnosis and treatment of a transsexual adolescent. *Eur Child Adolesc Psychiatry*. 1998;7(4):246-248.
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed revised. Washington, DC: American Psychiatric Association; 2000..
5. Zucker KJ, Bradley SJ. Gender Identity and Psychosexual Disorders. *FOCUS* 2005;3(4):598-617.
6. Sadjadi S. The endocrinologist's office—puberty suppression: saving children from a natural disaster? *Med Humanit* 2013;34:255-260.
7. Hayes, Inc. Hormone therapy for the treatment of gender dysphoria. Hayes Medical Technology Directory. Lansdale, Pa: Winifred Hayes; May 19, 2014.
8. Hembree WC, Cohen-Kettenis PT, Delemarre-van de Wall HA, et al. Endocrine treatment of transsexual persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab* 2009;94:3132-3154.
9. Moore E, Wisniewski A, Dobs A. Endocrine treatment of transsexual people: a review of treatment regimens, outcomes, and adverse effects. *J Clin Endocrinol Metab* 2003;88:3467-3473.
10. Clements-Nolle, K., et al. HIV prevalence, risk behaviors, health care use and mental health status of transgender persons: implications for public health intervention. *Am J Public Health* 2001;91(6):915-21.
11. De Vries ALC, Steensma TD, Doreleijers TAH, Cohen-Kettenis, PT. Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study. *J Sex Med* 2011;8:2276-2283.
12. World Health Organization. Eliminating forced, coercive and otherwise involuntary sterilization. Interagency Statement; 2014. Available at:

[www.unaids.org/sites/default/files/media\\_asset/201405\\_sterilization\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/201405_sterilization_en.pdf). Accessed May 16, 2016.

13. Johnson SB, Blum RW, Giedd JN. Adolescent maturity and the brain: the promise and pitfalls of neuroscience research in adolescent health policy. *J Adolesc Health* 2009;45(3):216-221.
  14. De Vries, A.L. and Cohen-Kettenis, P.T. Clinical management of gender dysphoria in children and adolescents: The Dutch approach. *J Homosex*. 2012; 59: 301–320
  15. Bailey MJ, Triea K. What many transsexual activists don't want you to know and why you should know it anyway. *Perspect Biol Med* 2007;50:521-534. Available at: [www.ncbi.nlm.nih.gov/pubmed/17951886](http://www.ncbi.nlm.nih.gov/pubmed/17951886). Accessed May 11, 2016.
  16. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Washington, D.C.: American Psychiatric Association; 2013.
  17. Abel, B.S. Hormone treatment of children and adolescents with gender dysphoria: An ethical analysis. *Hastings Cent Rep*. 2014; 44: S23–S27
  18. Malterud, K. Qualitative research: Standards, challenges, and guidelines. *Lancet*. 2001; 358: 483–488
  19. E.J. Slora, A.B. Bocian, M.E. Herman-Giddens, D.L. Harris, S.E. Pedlow, S.A. Dowshen and R.C. Wasserman, Assessing Inter-Rater Reliability (IRR) of Tanner Staging and Orchidometer Use with Boys: A Study from PROS, *Journal of Pediatric Endocrinology and Metabolism*, 22, 4
  20. Graber, J, Lewinsohn, PM, Seeley, JR, Brooks-Gunn, J, Is psychopathology associated with the timing of pubertal development? *Journal of the American Academy of Child & Adolescent Psychiatry*, 1997; 36: 1768-1776.
  21. Lee RJ, Smith MR. Hormone Therapy for Prostate Cancer. In: Chabner BA, Longo DL, eds. *Cancer Chemotherapy and Biotherapy: Principles and Practice*. 5th ed: Wolters Kluwer: Lippincott Williams & Wilkins; 2011.
  22. Guest, G., Brunce, A., and Johnson, L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*. 2006; 18: 59–82
  23. Ehrman Medical Library | 550 First Avenue, New York, NY 10016 | Phone: (212) 263-8483 | [library.med.nyu.edu](http://library.med.nyu.edu) | R. Faraino- Jan-06
  24. Zucker, Kenneth. (2017). Epidemiology of gender dysphoria and transgender identity. *Sexual health*. 14. 10.1071/SH17067.
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