



Capital University
Department of Liberal and Professional Studies
UNDERGRADUATE THESIS

Psychological and Medical Management of
Gender Identity Disorder:
Uncovering Disparate Treatment Issues

Submitted by
Debra London
Spring, 2004
Debxtc@geocities.com

Advisors:
Dr. Richard Romaniuk
Dr. Gloria Still

Index

Abstract	P. 4
Introduction	P. 5
Methodology	P. 7
Terminology	P. 7
Historical Perspective	P. 9
Prevalence	P. 12
Causation	P. 14
Animal Studies	P. 16
Body Morphology	P. 18
Familial Trends	P. 20
Endocrine Disrupting Chemicals	P. 22
Intersex	P. 24
Brain Differentiation	P. 26
Summary	P. 29
Medical and Management of GID	P. 31
DSM-IVtr	P. 32
HBIQDA Standards of Care	P. 34
Comparative Treatment Standards	P. 42

Obesity	P. 43
Cosmetic Surgery	P. 45
Medication and Mental Disorders	P. 46
Informed Consent	P. 48
Discussion	P. 49
Conclusion	P. 55
Personal Narrative	P. 58
New Learning	P. 66
Appendix 1 Terminology	P. 68
Appendix 2 Survey Results	P. 70
Appendix 3 Neurobiological Etiology Statement	P. 73
Appendix 4 Sample SRS Informed Consent Form	P. 78
References	P. 50

Abstract

Gender dysphoric individuals are subject to specific treatment standards in order to receive medical care. This paper looks at the historical context of gender dysphoria, prevalence data, and terminology along with a discussion of causation. An overview and critique of the Harry Benjamin International Gender Dysphoria Association Standards of Care and the Gender Identity Disorder diagnosis in the DSM-IV is provided. The standards that apply to those with Gender Identity Disorder are compared to standards directed towards other medical and psychological disorders. The discussion compares the standards applied to GID to standards for other disorder and identifies some of the bias's that are involved in treatment of gender dysphoric individuals. Recommendations are made for treatment standards that acknowledge the individuals right to self-determination.

Introduction

How do you describe what it is like to be a transsexual? This paper deals with theories and models, comparisons and ethics, but it doesn't explain what it feels like. Many of us who have struggled with our gender identity have wrestled with the concepts you will read about in these pages. For myself, this is personal.

My goal, beyond making a convincing argument for the disparate treatment that those with gender identity disorder and transsexualism receive, is to leave you with a sense of what it feels to be torn at the core of yourself. That sounds extreme, yet ask most gender incongruent people what it feels like and the answer is similar. Yet, how do I help you to know what that feels like? More importantly, can I stop feeling this way? That is what this is really about. It is my hope to give you a personal dimension along with the “pure” research in this paper.

We will discuss the main controversy in gender dysphoria studies, nature versus nurture. As we look at these two areas we will see that most of the evidence leans towards a biological explanation of Gender Identity Disorder (GID). While the data is still inconclusive, the predominance of research explains gender dysphoria as a developmental difference between the brains sex and the bodies' sex. Yet, as we will see, the psychological community holds most of the power over the lives of gender dysphoric individuals.

To achieve the goal of discovering differences in the treatment standards between GID and other disorders we will take a look at some of these situations and the standards that pertain to them. We will then contrast those treatment protocols to the ones that pertain to GID and look for the difference.

As we move through this paper we will discuss gender dysphoria as both a disorder and a naturally occurring expression of “humanness”. This can be rather confusing. In many ways gender dysphoria is a social disease. The struggles an individual confronts are problems of acceptance from society. This often leads to the concurrent psychological disorders those with gender dysphoria face. Anxiety, depression, and suicidal ideation are symptoms of the strain an individual faces as he or she confronts societies expectations regarding gender expression. When we say one “suffers” from Gender Identity Disorder we are often referring to the affect of the individuals internal need to express them-selves in a way that society views as inappropriate. There is also a level of mental distress that develops when one constantly second-guess's one's self. Not trusting yourself is common for those who grow up with gender dysphoric feelings. A recent study (Mirels, Greblo, & Dean, 2002) identified judgmental self-doubt as a major contributing factor to a range of emotional problems, especially depression and anxiety. This internal stress often leads to shame, guilt, self-hatred, denial and a host of other symptoms.

Methodology

This paper will use a review of the pertinent literature. Material will be drawn from all available sources including books, academic journals, and the Internet. Comparative analysis of the literature regarding standards as they pertain to Gender Identity Disorder versus other medical/psychological disorder will be used.

Terminology

There is a fair amount of disagreement within the transgender community on how best to define various terms. This makes understanding the nature of the problem difficult. Without having universal definitions that everyone is using, it is extremely difficult to reach any understanding. A list of common definitions is provided in Appendix 1.

A large portion of the confusion around terms is in the use of gender designators. Our language only allows for two categories of gender, male and female. For those who move between the two gender polarities, labeling can be difficult. It becomes even more so for those attempting to place an individual within a binary system. In this paper we will use the designator of one's chosen gender, instead of one's assigned birth sex. Therefore, a person born male who identifies as a female will be referred to as she.

The term “transgender” is one of the more confusing labels we will encounter. The label itself is used as an umbrella term to cover all whom cross gender boundaries to whatever degree. This is where difficulties arise in any discussion on gender identity. The differences between one who identifies as a transsexual and one who identifies as a cross-dresser are considerable. The motivation and desired outcomes

are very dissimilar. Placing the two within the same category makes any discussion confusing. The same applies for the various other categories, including drag queen/king, transgenderist, shemale, etc.

The focus of this paper will be on adults who identify as transsexual. Specifically, this paper will focus on M-F (male to female) transsexuals. This is not to deny the reality of the F-M (female to male) transsexuals; in fact, most of the comments made in this paper will apply to both groups. Rather, the intention is to focus in on one group in order to gain a better understanding of the group as a whole.

Using the term “transsexual” is controversial. In a strict sense, it is not a designator. The term used by both the Harry Benjamin Standards of Care and the DSM-IVtr to refer to this group is Gender Identity Disorder (GID). GID is a broad label: within this paper transsexualism will be used to refer to those who suffer from this disorder and wish to change genders. There are strong feelings within the transgender community about the use of GID and transsexualism as labels. The main problem with GID as a designator is that it refers to the syndrome as a disorder, rather than an organic, developmental reality. With transsexualism, the emphasis is on sex rather than on gender identity. Many feel this is both demeaning and inaccurate. Acknowledging these problems, we will still use the term, gender identity disorder to refer to the general category of those with strong gender dysphoria, and transsexualism to refer to those with GID that also wish to transition to the gender opposite their birth sex.

Historical Perspective

Crossing gender boundaries is not a new phenomenon. References to diverse gender expression have been noted throughout history (Green 1966, Kaldera 2001). Examining these earlier accounts we find a wide range of beliefs regarding those who cross gender boundaries. Mythology provides references to changing sex as both an act of desire and a punishment caused by gods or witches (Green 1966). Raven Kaldera (Kaldera, 2001) provides a number of early myths that speak to non-traditional gender expression. These myths and stories do not come from any one culture. Rather, early history has a number of references from a multitude of sources speaking of those who cross the gender line.

Written documentation from Greek and Roman times shows that transsexualism was, if not common, at least well known. Green provides us with a few of the key resources (1966). A quote from the Roman poet Manilius (Green 1966) gives us insight into how transsexuals were viewed during this time:

these persons will ever be giving thought to their bedazzlement and becoming appearance, to curl the hair and lay it in waving ripples..... to polish the shaggy limbs..... Yeah! and so hate the very sight of themselves as a man,..... and long arms without growth of hair. Woman's robes they wear... their steps broken to an effeminate gate... (p. 5)

One thing that is interesting to note from this quote is that the writer understood not only the desire to present as a female but also the deep self-hatred these people felt regarding their birth sex.

Later in history we continue to find examples of transsexuality. French

history has a number of examples of prominent figures that lived fully or partially as the opposite gender (Green 1966). King Henry III asked his court to refer to him as a female. The Chevalier d'Éon submitted himself (dressed as a female) as a new mistress for Louis XV. When his secret was discovered the king appointed Chevalier as a trusted diplomat. Upon Louis XV's death, Chevalier lived out the rest of his life as a female. Early American history makes note of the first Governor of New York, Lord Cornbury. He arrived from England dressed as a woman and remained that way during his time in office (Green 1966).

Other cultures also make strong reference to those who are gender-variant. Many Native American societies made a place for these individuals within the social fabric (Ettner, 1999). Often these individuals lived typical lives as members of their chosen gender; on other occasions they were viewed as priestess or shamans. Native American culture had many names for these individuals, unique to each tribe. The commonality is that transgendered persons were viewed as being of “two spirits” (Green, 1996), both male and female. Hawaiian culture contains no word for male or female, names are even androgynous (Ettner, 1999). Within this culture, the mahu are individuals who are seen as an intermediate sex, holding both maleness and femaleness. Mahus can express themselves in many ways: woman who dress and work as men, men who dress and work as women, people who chose same sex partners, intersexed individuals, etc. Many other societies have found ways to incorporate gender diversity into their social structure. For our discussion, the particulars of each of these societies are not important. What we need to make note of is that throughout history and within numerous cultures, people have recognized that gender is not a binary situation. The range of possible

expressions of male and female is much more diverse than modern society allows.

Prevalence

Collecting data on transsexualism and Gender Identity Disorder is extremely difficult. Many of those who struggle with this condition do so silently and very few studies have been done to attempt to identify actual prevalence rates. This is one area that clearly needs additional study.

The most often cited figure for GID is 1:30,000 for adult males. This number comes from the Diagnostic and Statistical Manual of Psychiatric Disorders (American Psychiatric Association, 2000). The DSM IV admits that these numbers come from small studies and phrases it this way: "There are no recent epidemiological studies to provide data on prevalence of Gender Identity Disorder. Data from smaller countries in Europe with access to total population statistics and referrals suggest that roughly 1 per 30,000 adult males and 1 per 100,000 adult females seek sex-reassignment surgery." (p. 579). One in thirty thousand is a very rare occurrence. Newspapers, insurance companies and others use this figure to note how rare (and therefore how insignificant) this disorder is. Yet what many fail to do, including the APA, is ask, does this number make sense? Throwing out a number that is inaccurate is misleading and may be a major part of the reason that transsexuals are treated so differently from those with other disorders.

Lynn Conway (2002) has attempted to get more accurate figures by approaching the problem in a backwards fashion. She begins by estimating the number of people who have had Sexual Reassignment Surgery (SRS) since 1960. By decade, she breaks it down this way:

1960's	1970's	1980's	1990's - 2002
1,000	6000-7000	9,000-12,000	14,000-20,000

Taking into account factors such as, people who came to the US for their surgery and deaths, Conway estimates there are 32, 000 individuals currently living in the US who have had SRS. By dividing this number by the number of males age 18-60 (approximately 80,000,000), she came up with a prevalence rate of 1:2500. When additional factors such as: those who go overseas for surgery, those who have not yet had surgery (pre-operative), and those who will never have surgery (non-operative) (are taken into account) Conway came up with prevalence rates between 1:500 and 1:250. This is a far cry from the APA's number of 1:30,000 and speaks to a very different situation when it comes to gender diversity. One must ask, why would the APA stick with numbers that are clearly misrepresentative of the true situation? The answer to this may have major implications in how (and why) transsexuals are treated by the medical and psychological communities, along with the larger society.

Causation

There is no clear-cut answer to what causes GID and ultimately transsexualism. For many years GID was seen as a psychological aberration. Beginning with Freud, causation was attributed to a host of psychological events in a young child's life. Freud theorized that transsexualism was a form of castration anxiety (cited in Bulloughs 2001). He felt that if a young boy saw his mother naked and noticed the lack of a penis, he would worry that this would happen to him. Why a child who was worried about losing his penis would identify with the one who had lost hers was something Freud never answered.

Since Freud's time, numerous psychological theories have been proposed to answer the what causes GID question. Contributing factors such as emotionally absent parent(s), lack of a strong male model, a smothering mother, or other dysfunctional family life (Brown & Rounsley, 1996) have all been viewed as the cause of why people become transsexuals. To date, no psychologically based theory has been shown to fit life patterns of most of those with GID. Some transsexuals have identified coming from dysfunctional families, yet many more have not had any major formative episodes in their early life that would seem to lead toward developing GID. Psychological explanations have not gone very far towards explaining GID. Psychological interventions have had even less success in providing any relief from this disorder. The academic literature has few case studies of successful treatment of transsexuals through psychological methods (Ettner, 1999). Additionally, there is one case study showing a "cure" through faith healing (Ettner, 1999). Overall, psychological (nurture) theories have not been able to explain how or why GID develops or provide effective treatment. The major problem is

that the psychiatric/psychological community has so much power over the lives of transsexuals. Even though they have little to offer in terms of relief, they have a lot of power when it comes to defining how GID is treated.

Recently, the publishing of the book, *The man who would be Queen: The science of gender bending and transsexualism* (Bailey 2003) sparked a huge debate within the transgender community. Within this book Bailey puts forth a theory of transsexualism based on the work of Ray Blanchard (1991). The basis of Bailey's and Blanchard's theory is that there are 2 types of transsexuals; androphillic, those who are sexually aroused primarily by men, and autogynephilic; those who are sexually aroused by the idea of being a woman (Lawrence, 2002). Within this theory all forms of gender dysphoria are limited to these two forms of misdirected sexual energy; homosexuals who can not accept their homosexuality or males who are caught in a fantasy of themselves as a women.

The publishing of Bailey's (2003) book set off a firestorm within the transgender community. Many felt that Bailey's book and the underlying work of Blanchard was misguided at best and scientifically dishonest at worst (Conway 2004, GenderPsychology.org 2004, James 2004). The general feeling is that the theory is based on scant, biased research which doesn't match the life stories of many who identify as transsexual. The controversy over this theory became so strong that after being nominated as a finalist for a Lambda Literary Foundation award the book was removed per request of the judges (Lambda Literary Foundation 2004). This is the first book ever removed as a nominee from a Lambda list. Taking such an unprecedented action shows just how polarizing this theory has become. It also has put researchers on notice that the

transgender community is no longer willing to be seen through biased filters.

On the other side of the causation question are the hereditary/biological theories. Over the past fifteen years a large amount of research has been done looking for a biological basis for GID. While no complete answer has been found, much of the research points toward a biological basis. There is research from areas such as animal studies (Gooren 1993), body morphology (Green & Young 2002, Zucker et al 2001) and Familial Trends (Green and Stoller 1971, Green and Keverne, 1999,) . Coolidge, et al (2002), looked at these studies and others and came to the conclusion that GID and transsexualism do have a strong heritable component. They made two main points in their conclusion:

1. Biological causation fits the available evidence better than psychological models.
2. Transsexuals show little to no concurrent psychopathology.

The above studies show a high likelihood of a biological component to GID, but they do not give much in the way of explanation of how this happens; for that we need to look deeper into biology.

Animal Studies

Research on animals gave some of the first clues that sexual differentiation did not end with development of external genitalia. The sexual differentiation of the brain takes place much later in fetal development than the development of the genitalia and continues after birth. Studies have shown that if a male rat is castrated shortly after birth he will develop female behavior traits. Conversely, a female rat given testosterone shortly after her birth will develop male behaviors. Similar studies done with other lower mammals have born

the same results. Clearly, hormones have a very strong effect on gender development long after development of the genitalia. The sexual differentiation of the brain seems to be able to be influenced by other factors than just sex chromosomes (Gooren, 1993).

How does this information relate to human sexual development? As Gooren (1993) notes, the human brain also undergoes a degree of sexual differentiation. There have been 3 areas so far identified as being sex-dimorphic. One of these areas, the sex-dimorphic nucleus in the hypothalamus, does not complete its differentiation until the 3rd or 4th year after birth. This seems to mean that long after birth, after it was decided that you are a male or female your brain is still in the process of sexually differentiating itself. This leaves a large window for a number of factors to come into play to influence this differentiation.

Body Morphology

Identifying pre-natal effects of hormones or genetics is often difficult through direct analysis; researchers often look for post-natal markers to identify these effects. One such area of study has been dermatoglyphics; that is the study of finger ridge asymmetry and total fingerprint ridge counts. It has been theorized (Jamison, et al., 1993) that testosterone levels during the third and fourth month of pregnancy affect dermatoglyphics asymmetry (cited in Slabbekoorn, et al. 2000). Both total ridge count and dermal ridge distance are different for males vs. females. Two studies looked at these effects in relationship to transsexualism. The first study (slabbekoorn, et. al., 1999) found that the sample population of transsexuals very closely approximated the same body sex control group. The authors concluded that there study found no correlation between hormonal levels in the 3rd - 4th month of development and transsexualism.

The second study (Green, Young, 1999) had a more interesting outcome. Green and Young did not find a global relationship between finger dermatoglyphics and transsexuality but did note a clear difference between homosexual (attracted to the same body sex) transsexuals and both the control group and heterosexual transsexuals. This finding tends to support Blanchard's (1989) findings that transsexuals are not a homogeneous group. Blanchard identified marked differences in homosexual and non-homosexual transsexuals and theorized that there may be different etiologies at work (cited in Green and Young 1999). While identifying sub groups of transsexuals is very important to our overall knowledge of the subject, it does complicate the tasks of researchers. Future studies may need to look at individual sub groups directly to identify causes. Green and Young's (1999) data points more towards a relationship between

sexual orientation and dermatoglyphics rather than transsexualism and dermatoglyphics. Further studies are clearly needed in this area, specifically comparing homosexual males and homosexual transsexuals.

A third study (Zucker, et. al., 2001) looked at handedness in boys with Gender Identity Disorder. The basic thesis behind this study is that the ratio of right handed to left handed people within the population is very constant— with 90% of the population being right handed. Prenatal or perinatal effects most likely cause changes to this ratio in a sample group. Should a sample of GID boys show a marked skewing of this ratio, this might be indicative of a biological effect causing both the GID and handedness. The results of this study did show a significantly higher rate of left-handedness in the boys diagnosed with gender Identity Disorder.

Markers such as handedness and dermatoglyphics are useful tools in unraveling the causes of Gender Identity Disorder. Caution must be taken when evaluating these studies. The effect (when found) often only applies to a small portion of the sample, statistically significant but not global. The other difficulty is attributing a cause to the effects. Zucker, et.al. (2001) postulated a number of factors that could influence both handedness and GID including both genetic and hormonal effects.

Familial Trends

Some early clues that transsexualism has a biological component came from finding of siblings with GID or transsexualism in 2 or more of the siblings (Green R., and Stoller R., 1971) (More, B. et. al. 1973) (Sabalis, R., et al. 1974) (cited in Green and Keverne 1999). Statistically, the chances of 2 siblings both developing something as rare as transsexualism is very small, given only a psychological cause. Green (2000) estimated the likelihood of a pair of siblings both developing transsexualism randomly at 1/100,000,000. These case studies led researchers to look for causation beyond a nurturing effect. Since most of the studies were case studies of a single family, researchers need to look at large samples to see if this effect was just a random chance occurrence or a more substantial effect.

One way of looking for a heritable effect is by examining family pedigrees. One study (Turner, 1995) identified a linkage between male homosexuals and a deficit in the number of uncles. Turner (1995) identified a likely possible cause for the transmission of homosexuality along maternal lines to a semi-lethal condition on the Xq 28 gene (cited in Green and Keverne 1999). As a follow up to this study Green and Keverne (1999) looked at ratios of maternal aunts to uncles among transsexuals. Their findings closely replicated the work of Turner (1995) finding a much higher ratio of aunts to uncles among the transsexual sample. The ratio was even higher when looking at the homosexual transsexual subset. Green and Keverne postulated a number of potential causes of this effect most having to do with a genetic fault, giving rise to hormone sensitivities or other genetic abnormalities. The authors did note that genetic/hormonal factors most likely create only a predisposition towards transsexuality. Nurturing and post

birth environmental events would also be factors involved in the final outcome of one's expressing transsexualism.

Coolidge, et. al., (2002) again looked at heritability and GID. Their findings supported previous studies that GID does seem to have a strong heritable component. In their discussion Coolidge, et. al.(2000) made note that environmental factors could not be ruled out as the cause. They then went on to state that the better fitting model is one that has to do with heritable factors. Additionally, the authors noted that there was little or no cocurrent psychopathology found among the sample population.

Endocrine Disrupting Chemicals (EDC's)

This may perhaps be the most the most frightening part of this discussion. When we look at Endocrine Disrupting Chemicals (EDC's), we realize that we may very well be creating a certain percentage of transsexualism through environmental contamination. Endocrine Disrupting Substance are a wide range of man-made chemicals capable of disrupting the normal endocrine functioning of most animals. The Environmental Protection Agency (EPA) defines EDC's as (Hoffman, Rattner, Burton, & Cairns, 2003),

an exogenous agent that interferes with the production, release, transport, metabolism, binding, action, or elimination of natural hormones in the body responsible for the maintenance of homeostasis and the regulation of the developmental process. (p. 1034)

One of the key words in the above definition is “developmental”. Endocrine disrupters have their strongest effects on offspring. These chemicals influence the hormonal development of the young in many species. The range of potential effects varies by species, degree of chemical exposure and other factors, but a partial list of effects include (pp. 1044-46): feminization of males, masculinization of females, delayed hatching, sex reversal, sex hormones, reproductive problems, spermatogenesis, developmental defects and a host of others. The range of possible effects this group of chemicals has on animal populations makes it extremely difficult to study. Sensitivity to exposure across species has a wide variation. One study that looked at one of these chemicals, Dioxin (TCDD) found that 20-50 parts per thousand (ppt) caused malformation and death in chicken eggs, while it took 1000-10,000 ppt to cause the same effect in other species (p. 1051). How an

effect on animals translates to effects on human is not currently known.

We will see in the next section that the brain sexually differentiates in a different time and through different channels than the body. Can EDC's affect this process? The answer to that is not yet know, yet this quote from the Environmental Health Perspective {United States Government, 2002 #63} should put us on notice that we may be poisoning ourselves in ways we can't yet understand.

A number of environmental chemicals have actions that mimic or alter the normal sex steroid hormones. The fetus is especially vulnerable because this is the period of time when organs develop. If the normal balance between estrogen's and androgen's is disrupted, the result may be feminization of males, masculinization of females, birth defects of the reproductive organs, reduced fertility, and alteration of the expression of normal feminine or masculine personality traits, probably including sexual preference (p.27).

Intersex

Intersexed individuals are classified as people who are born with a genetic or physical defect that affects how their primary sexual development occurs. There is a wide range of intersexed conditions and much of the research on these conditions still needs to be done. One area that is highly controversial is that of sexual reassignment surgery for infants or young children with intersexed conditions. For many years physicians, and psychiatrist subscribed to the “nurture” view of gender development. The feeling was that gender identity was a learned behavior. Therefore, physicians working with intersexed children found it reasonable to assign those with ambiguous genitals to one gender and then raise them accordingly. Recently this type of intervention has been called into question. Researchers at John Hopkins Medical Center (2000) have boldly stated “nature, not nurture, determines gender' (p.1). They based this view on a study of 27 genetically normal males all born with a condition called cloacal exstrophy. With this condition males are born with out a penis but do have normal testicles. According to the study, the presence of normal testicles is indicative of normal male hormonal patterns before birth. It has been standard procedure to castrate these children and raise them as female. In this study 25 of the 27 were raised as females. The research found that all the children who were raised as female have strongly male-typical behavior. Fourteen of the twenty-five children reassigned themselves back to a male gender and parents of some of the other children expect their children to make a similar choice. As one of the researchers stated “These studies suggest that male gender identity is directly related to normal patterns of male hormone exposure in utero” (p. 1).

The corollary of this statement is that development of a normal female gender identity is an effect of prenatal exposure to female hormones. From this basis it is not difficult to imagine a scenario where the developing fetus, for some reason, receives an incorrect level or type of hormone leading to a gender identity different from that of the bodies sex.

Brain Differentiation

In most ways transsexuals do not differ from their same sex counterparts. Genetically and hormonally the transsexual body is very much the same as the general populations. Looking for any differentiation is an important step in identifying causes of transsexualism. One study that was able to identify inherent differences between transsexuals and their same sex counterparts was done by Zhou, et. al., (1995). These researchers identified differences in the brains of transsexuals. These differences were found in an area called the central subdivision of the bed nucleus of the stria terminalis (BSTc). This area of the brain is thought to coordinate sexual activity. The researchers found that the number of neurons in this area within the brains of the transsexuals matched those found in the brains of the opposite sex. There is a much higher number of BSTc cells in the male brain. The Transsexual brains were much closer to the numbers found in female brains than in males. The researchers were able to rule out the effects of transsexual hormone replacement therapy as the cause of this difference. This was the first study to show a specific difference in the brains of transsexuals from their same sex counterparts. The results of this initial study were duplicated and refined by Kruijver et al. (2000). This followup study duplicated the findings of the first study and went further in eliminating possible effects of HRT, or lack of testosterone, as contributing factors in the identified sexually dimorphic differences. The biggest difficulty with this type of study is that the level of analysis required to examine this portion of the brain requires the brain to be autopsied. Therefore only brains from deceased persons can be used. As techniques of brain imaging achieve greater definition it is hoped that studies such as this will soon be able to be done on living brains.

Some of the most interesting findings to date come from the work of Dorner, et al. (2001). This team looked very closely at the effects of hormonal substance on brain differentiation. Their findings show that estrogenic and androgenic hormones have a direct effect on how the brain organizes itself. Differing levels of these hormones affect various portions of the brain at various times. Anything that interferes with this differentiation will cause the brain to develop in a different fashion than what is "normal". Dorner et al. (2001) identified the following as possible and likely causes of improper brain differentiation:

1. Mutations or polymorphisms of genes, e.g.
 - a) Mutations or polymorphisms of 21-hydroxylase genes in chromosome 6, e.g. heterozygous deletions of CYP 21 B or homozygous deletions of CYP 21 A or heterozygous point mutations in CYP 21 B
 - b) Very rare mutations of the 3 α -hydroxysteroid dehydrogenase gene on chromosome 1 and
 - c) Mutations or polymorphisms on the X-chromosome, as published by Hamer et al.,
2. Epigenetic effects, such as
 - a) Stressful situations can also affect sex hormone activities during sexual brain organization and
 - b) So-called "endocrine disrupters" were recognized to be possible epigenetic agents on ontogenesis for sexual brain organization; for instance the pesticide DDT and its metabolites display estrogenic, antiandrogenic, antigestagenic and inhibitory effects on the enzyme 3 α -hydroxysteroid

dehydrogenase, leading to increased levels of dehydroepiandrosterone as a precursor of endogenous androgens and estrogens, especially of placental estrogens.

It is beyond the scope of this paper to explain how each of these mechanisms affect sex hormone level and therefore brain differentiation. What is important is that these effects exist. As more data is developed, a clearer understanding of how hormones affect the brain and how that, in turn, affects behavior will become clearer. Dorner, et al. (2001) stated; "Most of all, our findings support the theory inaugurated in the 1970's that sex hormone activity in pre- and early postnatal life, which can be altered by genetic as well as epigenetic effects, are able to program sexual brain organization and hence sexual orientation, gender role behavior, and gender identity".

Summary of Findings

- No psychological theory has come close to explain how GID develops nor provided any cure.
- The brain continues to differentiate long after the primary sex organs are developed.
- Hormones can influence sexual dimorphism, during prenatal development and after birth.
- Endocrine Disrupting Chemicals can influence natal development.
- Transsexuals have been found to a higher ration of Aunts to Uncles, and greater degree of left handedness
- GID had been shown to have familial pattern
- The brains of transsexuals have shown similarities to the opposite body sex.
- Research on intersexed individual show that rearing (nurture) has little to do with ones sense of gender identity.

It is often difficult to evaluate competing theories. In the case of GID we have two competing models, psychological and biological. Depending on which theory one subscribes to, dictates the way one will interact with this population. Those who view it as a psychological problem are more likely to mistrust an individual who feels like she has GID. There will also be a tendency to view medical interventions as a last resort. The GID conflicted person is viewed as attempting to express an unnatural psychological aberration rather than a biological and developmental disorder.

When evaluating competing theories it is important to base any assumptions on a realistic examination of the literature and evidence. The principle of Parsimony, also called Occam's Razor, states, in general, “ One should always choose the simplest explanation of a phenomenon, the one that requires the fewest leaps of logic” (Rathe, 1996). When we examine gender identity disorder we need to look for the theory that is the best fit for the known clues. We have seen that there is a wealth of information pointing towards a biological causation. We have also seen that there is very little in the way of evidence for a psychological cause. Taking the simplest assumption that fits the available data we come up with a biological causation for GID. We then need to further evaluate this theory based on what types of treatment accepting the assumption as true leads to. To accomplish that goal we need a better understanding of how GID is currently viewed by the established bodies that have input on treatments.

Medical and Psychological Management of GID

To determine if transsexualism receives differential treatment compared to other treatment protocols, we need to first gain a working understanding of the standards that affect this disorder. There are two organizations that define treatment for GID, the Diagnostic and Statistical Manual of Mental Disorders (DSM-IVtr) put out by the American Psychiatric Association (APA), and the Standards of Care (SOC) developed by the Harry Benjamin International Gender Dysphoria Association (HBIGDA). Both of the organizations define the current psychological/medical views on transsexualism and the treatment protocols.

DSM-IV tr (Association:, 2000)

The Diagnostic and Statistical Manual (DSM) is put out by the American Psychiatric Association (APA). The DSM lists all the mental disorders that the APA has defined. The APA {American Psychiatric Association, 2000 #53} views a mental disorder as :

A clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. (p. xxxi)

This is a very broad definition and the APA does acknowledge that fact. In the prefix of the DSM the APA discusses the limits of the diagnosis and the fact that mental illness has a physical component and physical illness has a mental component (p. xxx). A reading of the above definition could lead to viewing anything that causes pain or disability as a mental illness.

In 1994, Gender Identity Disorder was included in the DSM: it replaced the diagnosis of transsexualism which first appeared in the DSM-III (1980). Listing GID in the DSM is not inherently incorrect, even if it is controversial. Gender Dysphoria does cause major distress and impairment in many of those who suffer from it. One area the DSM does fall short is in its description of GID. There is no mention of any possible biological basis for GID: rather the language tends to imply a strictly mental disorder. Statements such as “Adults with Gender Identity Disorder are preoccupied with their wish

to live as a members of the opposite sex” {American Psychiatric Association, 2000 p.577} are technically accurate yet misleading. The terms “preoccupied” and “wish” in this case imply an unreality to the sufferer's desires. The APA would do a great service by acknowledging the possibility that the distress one feels may have a biological origin.

As was mentioned earlier, the DSM provides highly inaccurate and misleading prevalence data. According to the manual, GID affects 1:30,000 males and 1:100,000,000 females. We have seen that these numbers are most likely absurdly inaccurate, yet the APA kept them in during the most recent revision in 2000. One would ask, is this an oversight or intentional?

Standards of Care (The Harry Benjamin International Gender Dysphoria Association 2001)

Doctors, therapists, and scientists who were doing research into gender dysphoria formed the Harry Benjamin International Gender Dysphoria Association (HBIGDA) in 1979. The initial Standards of Care created by this organization were designed to bring a sense of legitimacy to the treatment of transsexuals. Previous to the creation of HBIGDA, treatment of transsexuals was done by gender clinics at major hospitals and universities. These clinics often devised standards that eliminated most of the prospective clients from receiving treatment (Meyerowitz, 2002, p.226). During the earlier years of transsexual treatment (pre-1979) those wishing treatment were required to meet a very narrow view of acceptability in order to receive treatment. These clinics were not just interested in treating transsexualism, but also (and perhaps more importantly), the public image of their work. As Joanne Meyerowitz states (p. 226): “They tailored their medical model to enhance the public image of the program. They chose patients who would best exemplify success and rejected patients who did not neatly fit into the categories they devised.”

During this same period, transsexuals were forming their own networks. This “grapevine” became very well informed about the standards the various gender clinics set. As the doctors soon found out, many of those presenting for treatment were “carefully preparing and rehearsing for what amounted to an audition for surgery, (Meyerowitz, 2002, p. 226)”. This was the roots of what was to become an almost adversarial relationship between transsexuals and those who treated them. In the late 1960's and early 1970's the scientific literature was noting that transsexuals often changed

their presentation and life histories to match what doctors wanted. This led to the prevailing view that “transsexuals were unreliable historians... unable to recall very well, or inclined to distort (p. 161).” The transsexuals felt that to survive and receive treatment they had to fight against an often uncaring and hostile medical/psychological community. During the writings of the time, transsexuals were viewed as, extremely impatient, exhibitionistic, unreliable, queers, nuts, and other derogatory statements (p. 164). It was to bring some sense of understanding and order to this situation that HBIGDA was formed.

The current Standards of Care put out by HBIGDA are the sixth version, created in February of 2001. The purpose of the SOC is to, “articulate this international organization's professional consensus about the psychiatric, psychological, medical, and surgical management of gender identity disorder (The Harry Benjamin International Gender Dysphoria Association, 2001, p.1).” The SOC is intended as the guiding document for the treatment of GID and transsexualism. The Standards of Care encompass GID as it effects children, adolescents and adults. In this paper we are only focusing on the aspects which pertain to adults, it is important to keep in mind that there is also strong controversy over the way the SOC views and treats children and adolescents.

The SOC takes a 'gatekeeper’ view of gender identity disorder. The gatekeepers are mental health professionals who are charged with the following tasks (The Harry Benjamin International Gender Dysphoria Association, 2001, p.5):

- 1.To accurately diagnose the individual's gender disorder;

- 2.To accurately diagnose any co-morbid psychiatric conditions and see to their appropriate treatment;
- 3.To counsel the individual about the range of treatment options and their implications;
- 4.To engage in psychotherapy;
- 5.To ascertain eligibility and readiness for hormone and surgical therapy;
- 6.To make formal recommendations to medical and surgical colleagues;
- 7.To document their patient's relevant history in a letter of recommendation;
- 8.To be a colleague on a team of professionals with an interest in the gender identity disorders;
- 9.To educate family members, employers, and institutions about gender identity disorders;
- 10.To be available for follow-up of previously seen gender patients

While this list is not intended to be hierarchical it is interesting to note that the second item listed speaks to co-morbid psychiatric conditions. Placing this item high on the list gives the impression that psychiatric conditions are commonplace among gender dysphoric individuals and the therapist best be on the look out for these conditions. This is both misleading and untrue; studies have shown that GID individuals do not have any greater incidence of psychopathology than the general population, in fact studies on transsexuals after SRS show very high satisfaction rates (Ettner,1999, Lawrence, 2003). Interestingly, most of this data was published prior to 2001, when the SOC was finalized. This isn't to imply that gender dysphoric individual do not suffer from additional mental stressors like anxiety, depression, and suicidal ideation, these tend to be commonplace for most gender dysphoric persons. What is often missed is that these co-conditions are symptomatic of the gender dysphoria, as the individual works through the gender issues these symptoms tend to minimize.

Items 5, 6, and 7 in the previous list denote the gatekeeping nature of standards. Item 5 charges the therapist with defining eligibility and readiness while items

6 and 7 entrust the therapist with recommending the client for additional therapies and for writing the appropriate letters to other medical professionals'. This dual role of therapist and gatekeepers often creates difficulties for the client. Therapy can be a challenging process. For it to be successful the client must trust the therapist. Being open and honest becomes difficult when one is being evaluated by standards they may not agree with; yet need to reach to gain desired treatment. This requirement to not only attend therapy for a minimum of 3 months but also to place the therapist in control of ones destiny leaves many of those struggling with gender identity issues feeling even more out of control than they were before they decide to deal with the issue. In the words of one transsexual,

I am 52 years old; I've been married for 30 years, have raised 3 children, and run my own successful business. I find it incredibly frustrating to have to explain to a therapist why I need to do this. It is hard for me to sit back and have somebody else control my life and tell me whether or not it's OK for me to do something to my own body. Plus there is always the fear- what if they don't sign the damn letter? (Brown & Rounsley C. A., 1996, p.103)

This sentiment is reflected in the feelings of many transsexuals. Gender dysphoria is not something that sneaks up on someone; you don't wake up one day and say "I think I will become a woman today." Most have struggled with these feeling for the better part of their lives. When the time finally comes where they can't take living a lie anymore, the last thing someone wants to hear is "I, not you, will be the judge of that."

All the above does not mean that a gender dysphoric individual can't benefit from therapy. An Internet based survey that this writer ran during the latter part of 2002 (London, 2002) addressed some of the issue around how transgender individual's felt

about therapy. The survey was closed after receiving 160 respondents. Participants were drawn from transgender chatrooms and email lists, predominately geared towards transsexuals rather than cross-dressers. Of the respondents, 61% had attended individual therapy. Of this group, 46% reported entering therapy to work on gender related issues, while 38% entered solely to meet the Standards of Care. When asked about how they felt about their experience with therapy 51% felt it was great, an additional 21% called their experience good. Clearly, gender dysphoric individuals can benefit from a therapeutic relationship. It is the fact of being forced into therapy in order to receive medical treatment that many find distasteful.

The Harry Benjamin International Gender Dysphoria Association seems to take a controlling rather than a treating attitude. The effective purpose of the Standards of Care is to create a series of hurdles that a gender dysphoric needs to leap over in order to prove they are serious enough to get to the next level of treatment. Let's briefly examine each of these hurdles:

•**Mental Health Therapy** The standards recommend a minimum of 3 months of psychotherapy before the client may move forward to hormone replacement therapy. The assumption within this requirement is that an individual is not capable of making an informed decision in consultation with a medical professional regarding hormonal medication, only the therapist can determine if the individual is ready.

•**Hormone Replacement Therapy** If an individual receives an adequate assessment from a mental health professional or team of professionals they may then move forward with HRT. The first problem we find here is that there is no test or

assessment strategy that will show an individual is appropriate for HRT. According to the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 2002):

Psychologists administer, adapt, score, interpret or use assessment techniques, interviews, tests or instruments in a manner and for a purpose that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques. (sec. 9.02 a)

Yet, there is no research supporting the position that an individual will have better results on HRT if they first spend 3 months in therapy (Cohen-Kettenis & Gooren, 1999), so what does HBIIGDA base this requirement on? In fact the SOC speaks to the medical necessity of HRT (The Harry Benjamin International Gender Dysphoria Association, 2001). Hormone therapy is:

Often medically necessary for successful living in the new gender. They improve the quality of life and limit psychiatric co-morbidity, which often accompanies lack of treatment. When physicians administer..... estrogens, progesterone, and testosterone blocking agents to biological males, patients feel and appear more like members of their preferred gender. (VII)

By withholding medically necessary treatments HBIIGDA is causing unnecessary pain and suffering in the clients they serve.

•Sexual Reassignment Surgery For many gender dyphoric individuals genital modification surgery is an important step in obtaining body congruency. In order to qualify for this procedure individuals must meet the SOC's requirements of being on HRT for 12 months, accomplishing a one year real life experience (RLE), maintain

“regular responsible participation in psychotherapy” (XII 4) if required by a mental health professional, and be in possession of two letters attesting to their suitability for surgery. We have previously discussed the lack of any substantive research backing up these requirements except for the real life experience. On the surface, living for a period of time in ones desired gender would seem a good idea. It is, after all, a major surgical step and a life changing procedure. There is a fairly good body of research regarding satisfaction and regret of sexual reassignment surgery. Anne Lawrence (2002) in her review of the studies done during the 1990's noted that most of these studies suffered from “significant limitations” (p. 299). Some of these limitations are; small sample size, methodological problems, recruitment biases and variations in surgical techniques. Acknowledging these limitations, Cohen-Kettenis and Gooren came to this conclusion “In spite of the differences between studies, the general conclusion can be drawn that SRS effectively resolves the gender dysphoria transsexuals suffer from” (p. 327).

A recent study (Lawrence, 2003) looked at the factors that effected satisfaction and regret of sexual reassignment surgery. To eliminate bias of different surgical techniques, Lawrence surveyed the patients of only one surgeon (Toby Metzler, Portland, Oregon), and limited her respondents to those that had surgery with Metzler after 1994, the date he adopted his current surgical technique. Of the respondents, 22% did not meet at least one of the HBGIDA eligibility criteria for SRS. Overall, the results of this study showed 97% of the respondents felt that SRS had “improved the quality of their lives” (p. 309) and “no preoperative variables associated with compliance with accepted treatment regimens or other preoperative variables showed significant

correlation” (p. 308).

The HBGIDA came into being to bring a structure to treatment of a very misunderstood population. The association is to be applauded for opening the doors so that many who have strong gender dysphoric feeling can find support and treatment that will help them to go on and live productive, fulfilling lives. It is also clear that HBGIDA bases much of their treatment standards on outdated and inaccurate data. Based on our current psychological and biological understanding of gender dysphoria it is time for this group to step up and take a hard look at the Standards of Care.

Comparative Treatment Standards between GID and other Disorders

Most medical and psychological disorders have treatment standards or protocols. Rarely are these standards designed to be “one size fits all”. A range of potential treatments will be available to the patient. With consultation and input from involved professionals the individual will make choices about the best course of treatment for their unique situation. Medical and psychological professionals will help the individuals to understand the various options and often provide recommendations on what they see as the best course of action.

We will briefly look at a couple of situations. The goal here is to identify the standards that pertain to other disorders and situations and compare them to how GID is viewed and treated.

Obesity

Obesity shares a couple of common characteristics with GID. Both obesity and GID affect most aspects of a person's life, including his or her social interactions and medical/psychological health. Obesity is viewed as a multivariate syndrome involving both biological and behavioral components (Hill, 2000). While many of these interactions are not clearly understood, the outcome is. This is very similar to GID: in both cases psychological and biological factors interact leaving an individual with an incongruent sense of gender identity or a body that carries more weight than is healthy. We can look at both disorders as having a range of expressions depending on the severity of the disorder. With GID, this range can encompass anything from mild, occasional cross-dressing to a strong and persistent wish to change gender with SRS being the defining ultimate surgical intervention. Those suffering from obesity also show a range of possible outcomes; this can include mild to moderate excess weight, or extreme obesity. As with severe cases of GID, obesity also has surgical options.

We can make a couple of comparisons between the Standards of Care for GID and those for obesity. Surgery for severe obesity is referred to as bariatric surgery. This covers a range of surgical procedures. The American Society for Bariatric Surgery (ASBS) provides guidelines and rationales for these surgical interventions (American Society for Bariatric Surgery, 2001). Prospective patients are encouraged to have at least one try at a non-surgical weight loss attempt. Additionally, it is recommended that prospective patients be given the information necessary to make an informed decision. Pre-surgical psychological evaluations are viewed as ineffective in most situations. As the ASBS states:

“There are two possible reasons for pre-operative psychological testing prior to bariatric surgery. One is to weed out those with significant psychopathology in whom surgery would be contra-indicated, the other to pre-select those in whom the surgery is likely to be a success. Unfortunately psychological evaluation has proven of limited value in both these situations.”(American Society for Bariatric Surgery, 2001)

One of the arguments against SRS for transsexuals is that surgeons are mutilating a healthy organ (Meyerowitz, 2002p. 173). This doesn't come into play with bariatric surgery; surgeons view the modification of the healthy organs as medically necessary treatment to help the patient achieve a higher quality of life. The difference in the two views seems to grow out of the core beliefs that surround the disorders. Severe obesity is viewed as a medical problem that has a psychological component (American Society for Bariatric Surgery, 2001). Many who set the standards for GID hold the view that this disorder is predominately psychological. An example of this can be found in the words of Paul J. Fink, M.D., past president of the APA, it is his view that transsexualism “is not a normal sexual variant”. He goes on to say that psychiatrists must guard against “legitimizing behaviors that are actually disadvantageous”(Hausman, 2003). Views such as this completely ignore the fact that there are many very successful trans men and women, (Conway, 2004). It also ignores the fact that the satisfaction rates for those who have SRS are extremely high. (Lawrence, 2003).

Cosmetic Surgery

Changing one's appearance is a fairly normal fact of life for many in modern America. In the area of surgical changes, the decision to undertake surgery is left in the patient's hands after consultation with the surgeon. Informed Consent is both the ethical and legal standard that medical professionals are held to (Goldwyn & Cohen, 2001). Even in highly controversial surgical treatments, such as penile augmentation surgery, there is no requirement or expectation that one prove they need the intervention for the "right reasons," only that they understand the risks and possible complications of the surgery (Whitehead, 2004). We find a very different standard applied to those with GID. A male to female transsexual who wishes to have breast augmentation must first attend mental health therapy sessions for a minimum of 3 months to receive a letter to provide to the surgeon (The Harry Benjamin International Gender Dysphoria Association, 2001 p.6). Even if one meets this standard, the decision to have breast augmentation is not in their hands; as the SOC states: "breast augmentation mammoplasty may be performed if the physician prescribing hormones and the surgeon have documented that breast enlargement after undergoing hormone treatment for 18 months is not sufficient for comfort in the social role" (p.14). We see here that the decision is not up to the individual but rests in the hands of others who decide what is sufficient for him or her.

Medication for Mental Disorders

Many mental disorders listed in the DSM can be and are treated by non-mental health professionals. A recent Medscape poll showed that 70% of the respondents sometimes or always treated mental illness in adults and adolescents themselves (Medscape, 2004). While patients may benefit from psychotherapy or other non-medicinal interventions, the point here is that they are not required to. This is a marked difference from the attitude taken for those with GID. In order for someone with gender dysphoria to receive medication that may help minimize their distress, they are required to submit themselves to a mental health professional for examination and referral. The minimum recommended time for this evaluation is 3 months (The Harry Benjamin International Gender Dysphoria Association, 2001 p. 6). Once again, we see that there is a presumption of mental instability that the gender dysphoric person must disprove in order to receive medical treatment.

We also find a marked difference in how professionals respond to individuals who present with symptoms of mental disorders versus GID. A simple internet search of the term “warning signs of” will bring up numerous site that give symptoms of numerous disorders, both mental and physical. These include the warnings signs of: depression, diabetes, anxiety, heart disease and suicide, amongst others. The hope is that people will recognize their particular symptoms and seek appropriate treatment. This is very different from the treatment those with GID symptoms often receive. As early as the 1960's transsexuals were labeled as, “unreliable historians... unable to recall very well, or inclined to distort” (Meyerowitz, 2002, p. 161). To this day some clinicians begun with a presumption that their gender dysphoric clients will lie

about their symptoms. Maxine Petersen of the Carke Institute stated it rather bluntly, “most gender patients lie” (cited in Bailey, 2003, p. 172). Attitudes such as this leave gender dysphoric individuals feeling trapped; no matter what they say it will be seen as a lie.

Informed Consent

There exists in mental health and medicine a legal and ethical standard for communicating to a patients/clients the potential outcomes, risks, and benefits of a therapeutic intervention, this standard is called informed consent. The American Medical Association (AMA) lists the key elements of informed consent as:

- The patients diagnosis, if known;
- The nature and purpose of the proposed treatment or procedure;
- The risks and benefits of the proposed treatment or procedure;
- Alternatives, regardless of cost;
- The risks and benefits of the alternative treatment or procedure;
- and
- The risk of not receiving or undergoing a treatment or procedure.

(American Medical Association, 2002)

The intent of informed consent is to ensure that the patient (client) understands the nature of any procedures and has ample opportunity to discuss with the service provider any questions they may have. As Lurvey, Nagel & Johnson (1996) stated, “The goal of informed consent it to maintain patient autonomy and effect the most beneficent treatment Informed consent empowers the patient to take control of her own health care.” Through this dialogue process the client is able to make an informed decision regarding their medical and/or psychological treatments.

Discussion

Gender Identity Disorder is a complex problem. In order to understand the problem one must look at many issues. In this paper we have looked at some of the issues surrounding GID and transsexualism. We also have compared how GID is treated in relationship with other disorders.

Gender Identity Disorder is not only an individual's problem it is also a social issue. There are many factors that have little to do with the individual's well being that have gone into the creation of the category "transsexual". Our gender is such an integral part of who we are, that most rarely question it. When one crosses the gender boundary, others often view this as an act of insanity. This is the undercurrent running through current views of GID and transsexualism. We see this view in the SOC: gender dysphoric individuals are required to prove they are worthy of receiving treatment before being allowed to receive such treatment. The message seems to be, "We know you are crazy, now prove to us you are sane enough to receive treatment." This type of circular logic does not serve the individual nor does it serve society. All current studies have shown that GID persons who receive appropriate treatment go on to be effective, capable members of society.

How one views GID dictates how one reacts to it. Those who hold a psychological model see different treatment goals than those who hold a biological model. From the psychological perspective, medical intervention is seen as a treatment of last resort. After extensive therapy and self-examination, if one still feels he or she needs medical intervention, then, perhaps, it will be allowed. The locus of control is not with the individual, but with the therapist. From the biological perspective the person is

viewed as having a medical condition that requires some form of treatment. The available interventions cover a range depending on the individual's needs. In actuality, the range of possible interventions is the same in both the biological and psychological models. Psychotherapy, HRT, and SRS are all possible under either model. What differs is the intent of the models. The biological view supports the individual's right to determine what is best for her, the psychological view leaves the decisions in the hands of others.

Rather than there being a sense of cooperation between therapist and the gender dysphoric client, there seems to be an almost adversarial relationship. Those with GID view therapists as standing in the way of their receiving necessary treatment. The therapist often has the feeling that the client will lie or color the truth to make it match what the therapist wants to hear. Both of these situations are true. There is a feeling within the TG community that in order to receive hormones or letters for SRS, one must tell the holder of the keys what they want to hear. Perhaps this is a problem with having published standards. A therapist dealing with a gender dysphoric client is ethically bound to follow the standards. The question we keep needing to ask is, “Are the standards reasonable?”

There is an inherent contradiction in the Standards of Care that basically invalidates the whole document. We read on page 8:

Psychotherapy is Not an Absolute Requirement for Triadic Therapy. Not every adult gender patient requires psychotherapy in order to proceed with hormone therapy, the real-life experience, hormones, or surgery. Individual programs vary to the extent that they perceive a need for psychotherapy.

This is a very reasonable, client-centered perspective. If the SOC maintained this view, there would be very little to take issue with. Unfortunately, this is not the case. When we look at the eligibility criteria for hormone therapy we find the following criteria listed:

Eligibility Criteria. The administration of hormones is not to be lightly undertaken because of their medical and social risks.

Three criteria exist.

1. Age 18 years;
2. Demonstrable knowledge of what hormones medically can and cannot do and their social benefits and risks;
3. Either:
 - a. A documented real-life experience of at least three months prior to the administration of hormones; or
 - b. A period of psychotherapy of a duration specified by the mental health professional after the initial evaluation (usually a minimum of three months). (p. 13)

We see here that there are two ways to get hormone therapy, a real life experience or psychotherapy. There is actually a third way; the SOC does allow for those who are currently on black market hormones to continue their hormone usage under a doctor's care. We have here a document that on one hand acknowledges the clients right to self-determination, and then takes that away by establishing criteria for each medical step. Earlier in this paper we pointed out a similar contradiction when it came to breast augmentation surgery. The SOC makes this even more confusing. When discussing F-M procedures, the standards allow for breast tissue removal at the same time hormone treatment is started. Yet for M-F breast augmentation, the individual must wait a minimum of 18 months after beginning HRT, and then be approved by both a therapist and surgeon before being allowed to have the surgery. What is the message here? A genetic female wishing to be rid of her breasts is understandable and reasonable, but a genetic male wanting breasts, well, that's just crazy?

We find similar confusion and bias when it comes to sexual reassignment surgery. The standards of care require both 12 months of therapy and a 12-month real-life experience before approval for SRS can be given. Additionally, the client must be evaluated by two therapists, one of who must be a psychiatrist or Ph. D., before approval is given. The standards allow for very little flexibility when meeting these requirements. The real-life experience is considered a major test of one's resolve to live in their new gender role. One must live for 12 months in this role and “periods of returning to the original gender may indicate ambivalence about proceeding and generally should not be used to fulfill this criterion”(The Harry Benjamin International Gender Dysphoria Association, 2001 XII). The individual's life situation is not taken in to consideration when meeting this standard. One can make a case for many different scenarios that would not allow for a full-time real-life experience, yet these are not considered. The SOC can end up having the opposite effect from that which is intended. It can be the source of continuing pain and suffering as the individual strives to complete tasks that have not been shown to provide any inherent benefit.

For many who suffer from GID, body congruency becomes very important. Sexual reassignment surgery is a very important part of allowing one to feel right in their body. By holding this out therapists make their clients choose between doing what is socially and mentally healthy (maintaining jobs, families, taking care of elderly parents, etc.) and having a body that fits their brain. An individual may be better served by maintaining a dual existence; appearing in their male role when necessary, but at other times living in their female role. Unfortunately, in order to have SRS the individual must choose to live full time as their female self. To put this in perspective, let's go back to our

discussion on obesity. Surgical intervention for obesity involves modification of a healthy organ: this is similar to what happens during SRS. Would it be reasonable to require an obese person to live for one year as if he or she is a slim person? Requirements could be made that they would need to eat a liquid diet for 2 months, and then only eat tiny portions and a restricted diet afterwards. Additionally, it would be expected that they would wear more form-fitting clothing, maintain an active lifestyle, and involve themselves in other behaviors that would prove their readiness to be slim. If they slipped and acted like an obese person, they would need to start all over again. This scenario is absurd; it would leave the obese person feeling more frustrated than before he or she decided to have the surgery, yet similar standards are applied to gender variant persons.

It is time to change the core view of gender dysphoria. Those who treat this population need to recognize and accept that this is a medical problem and often requires medical solutions. As with most disorders, there is not one treatment regime that fits all people. Shifting from a psychological model to a biological model allows for a greater range of treatment objectives. One area this could readily be applied is in regarding hormone use. Currently, hormone replacement therapy is viewed as a step towards gender transition. When a male takes feminizing hormones, many changes take place, most of which are reversible. One of the major effects of HRT is a lowering of libido and decrease in erections. This effect makes for a very useful diagnostic tool. In many individuals gender identity gets intertwined with sexual arousal. Many people who come to think they are transsexuals do so later in life, after years of seeing themselves as a cross-dresser. Cross-dressing often has a strong sexual and fetishistic component. By

hormonally removing one's sex drive, the opportunity to discover if the gender dysphoria still exists becomes available. For those whose primary motivation is sexual, hormones would remove the incentive. For those who have a deep-seated gender dysphoria, the sexual distraction will be removed, allowing for a clearer self-examination. Should one find out that HRT and transitioning is not right for him, they can fairly quickly return to their normal male state. Using HRT as a diagnostic tool is a small philosophical switch that can play major dividends in helping the gender dysphoric individual to gain greater self-awareness.

Perhaps it is easier to think of gender dysphoria as a symptom, or an effect, of various biological processes. In our discussion of biological causation we saw that there are a number of different processes that can lead to an individual having a mismatch between their brain's sex and their body's sex. There does not seem to be one cause that manifests as gender dysphoria. Rather GID is an outgrowth of incongruent hormones during key periods in pre-natal development. There can be any of a number of contributory causes that affect hormone levels during gestation, so looking for a single cause may be misguided.

Our society honors the individual's right to self-determination. Choices to modify one's body, accept or reject various medications or attend therapy are routinely and rightly left in the hand of the individual. Yet, this simple right to choose one's level and type of psychological/medical intervention is denied the gender dysphoric individual. The logic behind this denial is based on outdated research and inaccurate assumptions. It is time to take an unbiased look at gender dysphoria and develop standards that acknowledge the individual's right to determine their own needs.

Conclusion

Transsexuals are becoming much more visible in society. Movie's and television shows are portraying transgender individuals much more realistically than in the past. Some states and municipalities are enacting legislation that acknowledges the right of gender variant individuals to have the same rights as everyone else in society. Being a transgender individual harms no one. It is only when the gender variant individual comes up against elements of society that are hurtful and harmful that problems surface. It is especially destructive when these harmful attitudes come from those who profess to be proponents of gender variant individuals.

The Harry Benjamin International Gender Dysphoria Association has set itself up to be the guiding body for gender dysphoric individuals. Yet we have seen that much of what HBIGDA bases its beliefs on is either inaccurate or biased. The association continues to promulgate an opinion of GID that is rooted in a psychopathological view. It is time for this to change. GID is a neurodevelopmental syndrome and needs to be addressed as such. Those who are born this way deserve to have reasonable access to treatments that they feel can help their situation. There is a philosophical switch that needs to be made. Currently, HBIGDA views GID from a traditional perspective, which is a mental illness/medical model. The switch is to view it from the perspective adopted by social work, the human behavior in the social environment model. From this view it is easy to see that the struggles that a person with GID deals with is how to best fit themselves into society. Out of this comes the wide

range of possible choices and interventions a person can use to integrate their uniqueness into the larger society.

There is a movement to bring our current knowledge of GID forward. An example of this can be found in appendix 3. This etiology statement has been signed by many of the international leaders in gender dysphoria research and calls for treating gender dysphoric individuals with respect and with the knowledge that they have a neurodevelopment condition. This attitude acknowledges the individuals right to self-determination. Another example of this type of thinking can be found in appendix 4. This is a sample informed consent form to be used for sexual reassignment surgery. This type of form creates a dialog between patient and surgeon to ensure that the client understands the ramifications of their decisions and that the surgeon feels comfortable that the patient is capable of making an informed decision. This is a major departure from the attitude that HBIGDA takes. Rather than treating a person as if they are incapable of making choices, informed consent acknowledges that the individuals has a right and responsibility to be an integral part of their treatment decisions. HBIGDA pays lips service to this philosophy but the way the SOC are worded and structured belies the actual intentions.

Gender dysphoria is a physical reality for many individuals. In many ways it can be considered a normal, albeit rare, expression of human diversity. Medical interventions allow those with this syndrome to function at a higher level. Denying these treatments or making them extremely difficult to get, leaves the individual in a constant state of stress, this has a tendency to lead to additional adjustment problems (suicide, depression, anxiety, etc.). In order to justify the Standards of Care as HBIGDA created

them, one must start with the assumption that feeling like you need to change your gender role is inherently wrong. In order to protect society from scores of people haphazardly changing gender strict methods must be utilized to control this problem. Of course this is absurd, well over 99% of the population feels congruent with there gender/sex match. Allowing those who differ from this norm to receive needed medical intervention is a realistic response to a difficult personal challenge. Anything less is just cruel.

Personal Narrative

When I was a young child, I often cried myself to sleep. My days were filled with pretending, pretending to enjoy playing with the other boys, pretending to hate girls and most uncomfortably, pretending I never had to go to the bathroom. By the time it became bedtime all I could do was lay there and cry, everything seemed so wrong, and I didn't understand why.

For as long as I can recall, I have felt different. My earliest memories are of wanting to play dress up with my moms clothing, jewelry, and makeup. For birthdays, I would wish for dolls or an easy bake oven. Since I was clearly a boy, these treasures were denied me. I don't ever recall asking for these things, I just knew I was a boy and was suppose to play with boy things. I somehow learned very young to separate off the part of myself that felt different and hide it away from others.

My childhood was in many ways like that of other boys, at least on the outside. I enjoyed riding my bike and playing in the woods. I put girls and girls things down, yet dreamed of being allowed to play with them. I hated sports, my friends told me I threw like a girl... go figure. I managed to keep my private world secret and everyone just assumed I was a rather shy, quiet, but normal boy.

I often pretended to be ill so I wouldn't have to go to school. I became very creative at faking illness. Did you know that if you rub the bulb of the thermometer very fast and hard with your tongue you can make the temperature go above normal? Mom didn't know that, so it was easy to fake a slight fever. My mother would often volunteer at the local hospital when I was in elementary school. Somehow I managed to get sick on days when she was suppose to go in. Since I was so trustworthy she felt comfortable

leaving me home alone for a few hours while she went and did her volunteer work. As soon as she was out the door, off I would go to play in her closet or even more enticing, the cedar chest.

My Mothers cedar chest was heaven for me. It was filled with all her special dresses, including her wedding dress. Playing dress up in all those beautiful gowns filled me with such a sense of wonder. My fingers would tremble as I tried to do all the tiny buttons up the back of the wedding gown. For a short time I was able to escape into a world of softness and beauty that for some reason was denied me. Many years later my therapist asked how I felt about this time. The only word I came up with was “pure”. It wasn’t a sexual experience, more of a freeing one. I would feel relaxed and beautiful and comfortable and happy. Yet it was also the beginning of my relationship with two friends who would be with me for a long, long time; shame and guilt.

On one level, dressing up in mothers clothing was so inviting and seductive, I was drawn to it. Yet, it was not all prettiness. I knew I was doing something that if others found out about they would hate me for. The shame and guilt I felt were very powerful. Very early I learned to deny this part of myself that wanted to be a girl. I was very conscious of differences between boys and girls and went out of my way to act like a boy. I wouldn't let myself cross my legs like girls did and somehow I decided that certain words would make me seem feminine. I would not say, “excuse me”, it seemed feminine to me and I would not allow myself to say it. Looking back it is clear how early and how well I shut myself down and what a price I paid for that.

Even though playing with my mother’s makeup was an incredible thrill I rarely allowed myself to put it on. The few times I did, I loved it. All those powders in

all those colors made me look so pretty. Then the time would come to wash it off, and the fear set it in. I would wash my face repeatedly trying to scrub off every trace of those telltale colors. Lips were the worst. Every time I checked the mirror I was sure I could still see color on my lips, so I would scrub harder. I didn't realize that scrubbing that harder made me lips red; I just thought it was lipstick, so I scrubbed again. I would often yell at my reflection in the mirror, telling myself how stupid I was to play with makeup or in my mother's closet. Looking back, it is very clear just how fearful I was. I longed for so much I couldn't have and felt so guilty for wanting it.

I suppose most people would say puberty was hell. Your body goes through many changes; hormones rage and emotions are a seesaw. Combine these changes with feeling like you are utterly different from everyone around you and that you will never be the person you want to be and you have my life. During this time dressing became highly sexualized and stayed that way for a long time. The combination of doing something so forbidden (dressing in women's clothing) and raging male hormones is a dangerous combination. In many ways I became the object of my own desire. While my friends were exploring their new sexuality as men through playboy, penthouse or any other material they could get. I was sneaking into my mother's closet, dressing up and fantasizing that I became the women I saw in those magazines. The shame I felt before puberty was nothing compared to how I felt about myself once sexuality arrived in my life.

I tried and I tried to be a proper guy. Over the years since puberty I repeatedly purged myself of every piece of women's clothing I owned. "Never again", I would tell myself and that would last, for a month sometimes longer longer. No matter

how much resolve I had, back to dressing I would go. On the rare occasions that I thought about it, I considered myself a freak, a sexual deviant and this just led to more self-hatred. Anyone who knew me during my teens, 20's and 30's would consider me a rather normal, nice guy. For the most part, I bought my act also. I tried to walk the expected course, went to school, college, got married and had children, and mostly failed at them all. I was also completely unmotivated and cut off from myself. This led to years of failing at many of the things I attempted. Hindsight can be a wonderful tool; looking back I can see that I was doing life with only a portion of myself available.

I first confronted the Standards of Care when I decided it was time to put myself on hormones. I had read the SOC and I knew I was required to attend therapy for some period of time. Initially, I didn't have a problem with this, as I am a firm believer in the benefits of therapy when struggling with life changing decisions. I had done a fair amount of therapy and self-exploration previous to my decision to try hormones and I felt pretty comfortable with the decision.

I asked around the local transgender community for recommendations on therapist. There were only 2 locations that were known to have experience in gender dysphoria. One of these I had already been a client at, in fact, according to the psychiatrist I saw there, I am cured... but that is a tale for another day. I made an appointment at the other clinic.

At the time of this first session I had been "out" for around 6 months. During those six months I had made great strides in developing a level of self-honesty that I never had before. Initially, therapy was good. My therapist and I discussed many of the issues surrounding my gender dysphoria including; How to interact with my children and

ex-wife, where I felt I fit on the gender spectrum and what I saw as my future. I was very open with my therapists, and that came back to bite me. I could not say for 100% that I wanted to live as a woman, I just knew that for the first time in my 40 years I needed to fully and openly explore this side of myself. I told my therapist that I had made an appointment with an endocrinologist and I planned to go on hormones to see how I felt. She informed me that I need to go before the gender committee to get approval for HRT.

Seven psychotherapists and myself in a very small room, talk about feeling like a deer in the headlights. Before this meeting I decide the only way to present myself was to be totally honest. I knew that was a risk, most of friends told me to tell the committee just what they wanted to hear, that I was totally and completely sure I wanted to transition. I took a different route and told the truth. I wasn't sure; I planned on going on hormones for 6 months, then off them for 6 months. This would give me a chance to evaluate how I felt each way. This seemed to me to be a very sensible approach to figuring out an extremely difficult problem. The committee and I discussed various aspects of myself and my gender dysphoria, I explained why I planned to go on HRT and what I expected to gain from the experience, then I left and they evaluated me. A week later I received a letter from the head of the clinic (a psychologists), basically I was informed that I did not qualify for HRT, more therapy (@ \$85/hour!) was required to resolve my "ambivalence". At this point I probably lost it, I was furious. I had to spend \$150 to go before this group of "experts" to have them tell me I had ambivalent feelings. I was very upfront with them; I freely acknowledged my mixed feelings and the logic behind my decision. Within hours of getting the letter I was back at the clinic and in the director's office; I was just a wee bit upset. Perhaps there is a lesson in this.... don't piss

off someone who feels like a woman but has testosterone in her veins. I let him know exactly what I thought about him, his clinic and the treatment the gender dysphoric community received at his hands. He was pretty adamant about not writing an approval letter for HRT, he kept referring to the Standards of Care as the basis for his decision. Oddly, his tune changed when I threatened to file an ethics violation with the APA. I saw it as an idle threat, I really didn't have a clue if I had any case or what difference it would make. It did get his attention though, and I received my letter.

We can look at what we go through as transsexuals as milestones or hurdles. I smashed the “get your letter for HRT” hurdle. Now I was on to hormones. Thinking about altering your bodies’ chemistry through hormones is both scary and exciting. I was filled with doubt, but also knew it was something I needed to explore. After about a month on hormones I felt quietness in my mind, I don't know how to describe it other than it felt like the war between my body and my brain came to an end. I was at peace, I would venture out into the world, a bit uncomfortable wondering what people felt about this guy in woman's clothing, but inside I felt whole and happy. Then the time came to go back off the hormones.

It didn't take a month to start feeling miserable. Within 2 weeks I felt the old turmoil surfacing. I became very aware of how much self-hatred I had towards my body. The biggest difference between being in my natural state now, and before I started taking hormones was that I now knew just how miserable I was. Before starting on HRT I had deeply buried most of my feeling, now they were out and it wasn't fun. I became extremely depressed, unfortunately I didn't recognize the depression as it was happening, I just slipped deeper and deeper into it. When I found myself in my car with a bottle of

vodka and a hose to attach to the exhaust pipe, I woke up. Being a transsexual is not worth killing yourself over. If society decides to view me as a freak, a deviant or whatever, it is ok, I can and will handle it. I was pretty quickly back on hormones.

That day in my car, thinking about killing myself was the second worse day of my life. The worst came about 2 weeks later. I was driving back to town from about 4 hours away. Shortly into my trip I began to cry, sadness and tears welled up within me with such force that I could barely drive (I'm sure it wasn't safe to be on the road). As this overwhelming sadness took control, I saw my life. I felt my life, everything I had hidden from myself came rushing out. Years of denial, self-loathing, and longing were all laid out in front of me, and I cried. Then I died; the person I was went away. The feeling was so strong and so clear; that I knew it was true. A major piece of myself ceased to exist. In my pain I felt a sense of gratitude. I was thankful for the part of me that helped me to survive. I had built an image that allowed me to face the world, now this part was gone, with sadness and gratitude; I cried the rest of the way home.

I still don't know why people become transsexuals. I have my belief, I see it is a neurodevelopment condition, but I don't know for sure. Really, it doesn't matter. Whatever the cause, I am who I am, and I am getting OK with that. It is rather funny; I spent the better part of my life living in fear of people discovering my secret. Much of my energy went in to denying and hiding my gender dysphoria, leaving little energy for much else. Once I accepted myself and stepped out into the world, I realized.... most people don't care! Who knew? If I treat people well, am friendly and honest most people easily get beyond my gender presentation. Some even like me. What a shock this was. So many years of living in fear that if people found out I would become an outcast all

disappeared with the simple act of accepting myself. Of course there are people who take issue with me and have their judgments. I cannot live my life for them, as long as they don't punctuate their opinions with sharp objects directed at me, all is OK.

It is often said that a transsexual is a “woman trapped in a man's body.” For a long time I bought into this view. It is only lately that I have begun to modify this. I believe it is true that I was born with a basically male body and a mind that seems female. I also accept that I will never really be a woman. There have been too many years of living within my “maleness”, too much socialization for me to ever know what it feels like to be a woman. Sometimes this bothers me, a piece of myself longs for all those experiences that a woman has growing up, that I will never have. I want to hear my dad tell me I am his special girl, I want to be included in the “woman space” among my family, but these are not for me. I am not a woman trapped in a man's body, I am a (for lack of a better term) transsexual. While I feel more comfortable and congruent presenting as a woman, I also know there is much I will never have in common with genetic woman. Often this is difficult to accept. I used to label myself as a freak or just crazy. For the most part, I have dropped those designators, now I see myself as unique and mostly proud of who I am.

New Learning

It was an interesting process putting together this paper. I began it with both a sense of excitement and intimidation. To date the longest paper I had written was around 20 pages and I expected that this would be a much larger task, and it was. The process of the two classes (LPS 399/499) was a great framework to work on this project from.

The research I did for this was fascinating. I found many useful pieces. In fact, I found way to many and needed to continually evaluate which pieces to use and which to put aside. This stretched my organizational skills. I needed to find efficient ways to organize my materials so that I could find them when I wanted them, but wasn't constantly sifting through everything to find a piece I knew was somewhere. Thank goodness for file folders, index cards and my investment in EndNote7 software.

As I moved closer to completing this paper I realized I was getting very tired of the subject matter. It wasn't that the material was uninteresting. It was more that I had been struggling with my own gender issues for 5 years now and I was getting fed up with defining myself as a transsexual. I have written on the subject a number of times and I think I reached a wall. My frustration became a very powerful experience. By examining my feeling towards this project, I was able to gain a better understanding of my own frustrations. One thing I learned is that this type of paper is important. Gender Dysphoria is not a well-known problem and there is a great deal of discrimination that gender dysphoric individuals face. Bringing to light these issues is both worthwhile and needed. It is also only a part of who I am.

The gift that came out of writing this paper was a deeper sense of gratitude. I firmly believe we all have areas we can make a difference in. We don't always get to choose

what challenges we will face; we only get to choose how we will handle them. I am a transsexual woman and that is unique. If by writing papers such as this I can increase others awareness of gender issues and ultimately make it easier for those who come after me to find themselves, then my time was well spent.

I am not intimidated to write anymore. I now know the mechanics of structuring a large project. I am very confident in my ability to find appropriate research and then format it into a coherent, logical argument (well, I hope I did that). Most importantly I had fun!

Appendix 1

Transgender Terminology (not an exhaustive list)

Androgyny: The ability of a person to express both stereotypically masculine and stereotypically feminine traits and behaviors.

Bigender: One who switches between masculine and feminine gender roles from time to time.

Cross Dresser (CD): One (regardless of the motivation) who wears clothes, makeup, etc., which are considered (by the culture) appropriate for the other sex but not one's own.

Drag (In Drag): Clothes, often unusual or dramatic, especially those considered appropriate to the other sex.

Drag Queen: A man who employs dramatic clothes, makeup, and mannerisms, often for other people's appreciation.

F->M: Female to male (F2M/FTM). Used to specify the direction of a sex or gender role change from female to male.

Female Impersonator (FI): A male who, on specific occasions, cross-dresses and employs stereotypical feminine dialog, voice, and mannerisms for the entertainment of other people.

Gender: 1. Grammar. A category used in the analysis of nouns, pronouns, adjectives, and, in some languages, verbs that determines agreement with modifiers, referents, or grammatical forms. 2. Sexual category; males or females as a group.

Gender differences: Differences in physiques, ability, attitude, or behavior found between large groups of males and females. Also called sex differences.

Gender identity: An individual's own feeling of whether she or he is male or female.

Gender-identity disorder: A psychiatric label for those disorders characterized by a sense of inappropriateness and attendant discomfort concerning one's sex anatomy and one's gender/sex role.

Gender neutral: Clothing, behaviors, thoughts, feelings, relationships, etc. which are considered appropriate for members of both sexes

Gender role: Arbitrary rules, assigned by a culture, for males and females that define what clothing, behaviors, thoughts, feelings, relationships, etc. are considered appropriate and inappropriate for members of each sex.

Gender-role identification: The process by which individuals incorporate behaviors and characteristics of a culturally defined gender role into their own personalities.

Gender-role socialization: The training of children by parents and other caretakers to behave in ways considered appropriate for their sex.

Hermaphrodite: One having the reproductive organs and many of the secondary sex characteristics of both sexes.

M->F: Male to female (F2M/FTM). Used to specify the direction of a sex or gender role change from male to female.

Male Impersonator: A female who, on specific occasions, cross dresses and employs stereotypical masculine dialog, voice, and mannerisms for the entertainment of other people.

Pre-operative transsexual (Pre-op TS): One who is actively planning to switch physical sex roles.

Sexual Reassignment Surgery (SRS): A surgical procedure that changes one's primary sexual organs from one sex to another (penis to vagina or vagina to penis.)

Transgender (TG): One who switches gender roles, whether just once, or many times at will. This term can be an inclusive term for transsexuals and transvestites.

Transsexual (TS): One who switches physical sex surgically.

Transvestite (TV): One who mainly cross dresses for pleasure in the appearance and sensation. The pleasure may not be directly erotic. It may be empowering, rebellious, etc. May feel comfortable in a focused transgender role while cross-dressed.

Appendix 2

Recent Survey of MtF Transgender Individuals

Survey conducted 11/15/02-12/15/02

Internet Based

Data collection was held to 160 respondents

Limits of Survey

Only available on the Internet

Respondents from outside the US were excluded

Survey request were limited to the more “serious” chat room/email lists

Demographics

Total Responses 160

Average Age 45 SD 10

Earliest “dressing” 9

Self Identify as:

Male	11%
Female	22%
Cross-dresser	11%
Non-Op	7%
Pre-Op	29%
Post-Op	5%
Transgenderist	10%
Other	3%

Marital Status:

Single	38%
Married	36%
Divorced	15%
Committed	11%

How would you define your sexual orientation?

Men	10%
-----	-----

Women	31%
Transgender	1%
Men & Women	14%
Men & TG	1%
Women & TG	15%
All	19%
Not Applicable	9%

If you now identify as a transsexual, did you always feel this way?

Yes, I knew I should of been born a female	65%
At first, I thought I was a cross-dresser	11%
I didn't know what I was, I just enjoyed women's clothing	24%

How would you describe your cross-gender activities?

I only dress in private	28%
I go out to TG safe bars/clubs, social groups	19%
I go pretty much anywhere I wish	26%
I am fully out	27%

Are you on Hormone Replacement Therapy?

No	41%
Yes, Herbals	3%
Yes, 0-6 months	11%
Yes, 6-12 months	8%
Yes, over 1 year	38%

Are you under a Doctors care for HRT?

Yes	62%
No	38%

N=97, percentage based only on those on HRT

How do you obtain your Hormones?

Local Pharmacy	54%
Overseas Pharmacy	21%
Combination	12%

Other source 12%

N=97, percentage based only on those on HRT

Have you had individual therapy/counseling for gender related issues?

Yes 61%

No 39%

On average respondents reported seeing 2.35 Therapists

Average time spent in individual therapy was 21 months

What was your primary reason for entering therapy?

To meet the Standards of Care 38%

To work on gender related Issues 46%

To work on my marriage 12%

Seemed like a good idea 4%

Group Therapy:

22% of the respondents had participated in group therapy

On average, they attended 38 sessions

Overall, How would you rate your experience of Therapy?

Poor, the therapist didn't have a clue 10%

Fair, I received some help 19%

Good, the therapist was helpful and seemed to understand 21%

Great, Therapy helped me figure out where I am going 51%

Appendix 3

ADULT GENDER IDENTITY DISORDER & TRANSSEXUALISM

1. Gender Identity Disorder is defined as an incongruence between the physical phenotype and the gender identity^[1], that is, the self identification as male or female. The experience of this incongruence is termed Gender Dysphoria. The most extreme form, in which individuals need to adapt their phenotype with hormones and surgery to make it congruent with their gender identity, is called transsexualism^[2]. Those individuals experiencing this condition are referred to as trans people, that is, trans men (female to male) and trans women (male to female).

2. Transsexualism can be considered to be a neuro-developmental condition of the brain.^[3] Several sexually dimorphic nuclei have been found in the hypothalamic area of the brain (Allen & Gorski, 1990; Swaab *et. al.*, 2001). Of particular interest is the sexually dimorphic limbic nucleus called the central subdivision of the bed nucleus of the stria terminalis (BSTc) which appears to become fully volumetrically sexually differentiated in the human brain by early adulthood. This nucleus has also been found to be sexually dimorphic in other mammalian and avian species (Miller *et. al.*, 1989; Grossmann *et. al.*, 2002). In human males the volume of this nucleus is almost twice as large as in females and its number of neurons is almost double ($P < 0.006$) (Zhou *et. al.*, 1995; Kruijver *et. al.*, 2000; Chung *et. al.*, 2002).

3. The Kruijver *et. al.* study, cited above, indicates that in the case of transsexualism this nucleus has a sex-reversed structure. This means that in the case of trans women ($n=7$), the size of this nucleus and its neuron count was found to be in the same range as that of the female controls ($n=13$) and, therefore, women in the general population. In the only available brain of a trans man, the volume and structure of this nucleus was found to be in the range of the male controls ($n=21$) and, therefore, men in the general population. It is hypothesised that this male-like BSTc will be present in other trans men as well. These findings were independent of sexual orientation and of the use of exogenous sex hormones. In the 42 human brains collected for this study, the BSTc was found to have a structure concordant with the psychological identification as male or female. It is inferred that the BSTc is an important part of a sexually dimorphic neural circuit, and that it is involved in the development of gender identity (Kruijver *et. al.*, 2000).

4. Sexual differentiation of the mammalian brain starts during fetal development and continues after birth (Kawata, 1995; Swaab *et. al.*, 2001). It is hypothesised that in humans, in common with all other mammals studied, hormones significantly influence this dimorphic development although, at present, the exact mechanism is incompletely understood. It is also postulated that these hormonal effects occur at several critical periods of development of the sexual differentiation of the brain during which gender identity is established, initially during the fetal period, then around the time of birth; and also post-natally. Factors which may contribute to an altered hormone environment in the brain at the critical moments in its early development might include genetic influences (Landén, 1999; Coolidge *et. al.*, 2002) and/or medication, environmental influences (Diamond *et. al.*, 1996; Whitten *et. al.*, 2002), stress or trauma to the mother during pregnancy (Ward *et. al.*, 2002; Swaab *et. al.*, 2002).

5. Gender identity usually continues along lines which are consistent with the individual's phenotype, however, a very small number of children experience their gender identity as being incongruent with their phenotype. Adult outcomes in such cases are varied and cannot be predicted with certainty. It is only in a minority of these children that, regardless of phenotypical socialisation and nurture, this incongruence will persist into adulthood and manifest as transsexualism (Green, 1987; Ekins, 1997; Prosser, 1998; Di Ceglie, 2000; Ekins & King, 2001; Bates, 2002).

6. As stated, in trans people, a sex-reversed BSTc has been found. The findings of a specific sex-reversed brain organisation in trans people provides evidence consistent with the concept of a biological element in the etiology of transsexualism. The evidence for an innate biological predisposition is supported by other studies, one example of which, indicates a higher than average correlation with left-handedness (Green & Young, 2001). Where the predisposition for transsexualism exists, psycho-social and other factors may subsequently play a role in the outcome, however, there is no evidence that nurturing and socialisation in contradiction to the phenotype can cause transsexualism, nor that nurture which is entirely consistent with the phenotype can prevent it (Diamond, 1996). There is further clear evidence from the histories of conditions involving anomalies of genitalia, that gender identity may resolve independently of genital appearance, even when that appearance and the assigned identity are enhanced by medical and social interventions (Imperato-McGinley *et. al.*, 1974; Imperato-McGinley *et. al.*, 1979a; Imperato-McGinley *et. al.*, 1979b; Rösler & Kohn, 1983; Meyer-Bahlburg *et al.*, 1996; Diamond, 1997; Diamond & Sigmundson, 1997; Kipnis & Diamond, 1998; Reiner, 1999; Reiner, 2000). It is not possible to identify one single cause for transsexualism: rather, its causality is highly complex and multifactorial. The condition requires a careful diagnostic process, based largely on self-assessment, facilitated by a specialist professional.

7. In conclusion, transsexualism is a neuro-developmental condition of the brain. (Zhou *et. al.*, 1995; Kruijver *et. al.*, 2000). The condition cannot be overcome by contrary socialization, nor by psychological or psychiatric treatments alone (Green, 1999). Individuals may benefit from an approach that includes a program of hormones and corrective surgery to achieve realignment of the phenotype with the gender identity, accompanied by well-integrated psychosocial interventions to support the individual and to assist in the adaptation to the appropriate social role (Green and Fleming, 2000). Treatments may vary, and should be commensurate with each individual's particular needs and circumstances.

Signatories {original authors are asterisked}

Dr Henk Asscheman, MD, PhD. (The Netherlands)*

Professor Michael Besser, DSC, MD, FRCP, SmedSci. (UK)

Dr Susan Carr, MPhil. MFFFP. DDRCOG. (UK)

Professor dr Peggy Cohen-Kettenis PhD. (The Netherlands)

Dr Pamela Connolly PhD. (USA)

Professor dr Petra De Sutter, PhD. (Belgium)

Professor Milton Diamond, PhD. (Chair) (USA)*

Dr Domenico Di Ceglie, FRCPsych., DIP. PSICHIAT. (Italy) (Child Section) (UK)*

Professor Richard Green, MD, JD, FRCPsych. (UK)

Professor Louis Gooren, MD, PhD. (The Netherlands)

Dr Frank Kruijver, MD. (The Netherlands)*

Dr Joyce Martin, MRCP, MB, ChB, D.Obst.RCOG. (UK)*
 Dr Zoe-Jane Playdon, BA(Hons), PGCE, MA, MEd, PhD, DBA, FRSA. (UK)*
 Mr David Ralph, MBBS, BSc, FRCS, MS. (UK)
 Mrs Terry Reed, JP, BA(Hons), MCSP, SRP, Grad Dip Phys. (UK)*
 Dr Russell Reid, MB, ChB, FRCPsych. (UK)*
 Professor William Reiner, MD. (USA)
 Mr M. Royle, MBBS, FRCS (Urol) (UK)
 Professor Dick Swaab, MD, PhD. (The Netherlands)
 Mr Timothy Terry, BSc, MB, BS, LRCP, FRCS (Urol), MS (UK)
 Mr Philip Thomas MBBS, FRCS (Urol). (UK)
 Professor James Walker, MD, FRCP, FRCOG. (UK)
 Dr Philip Wilson, DPhil MRCP MRCPC FRCGP. (UK)
 Dr Kevan Wylie, MB, MmedSc, MD, FRCPsych, DSM. (UK)

References:

1. Allen LS & Gorski RA. (1990) Sex Difference in the bed nucleus of the stria terminalis of the human brain, *Journal of Comparative Neurology* **302**:697-706.
2. Bates DJ. (2002) Locating the transsexual narrative in the gendered landscape. The University of Waikato; New Zealand. 437 pages
3. Chung WCJ, De Vries GJ, Swaab D. (2002) Sex differentiation of the bed nucleus of the stria terminalis in Humans may extend into adulthood, *Journal of Neuroscience* , **22**(3):1027-1033.
4. Coolidge, FL, Theda LL, & Young SE (2002) The heritability of gender identity disorder in a child and adolescent sample. *Behavior Genetics* **32**:251-257.
5. Diamond, M (1996) Self-testing among transsexuals: a check on sexual identity. *Journal of Psychology & Human Sexuality* **8**(3): 61-82.
6. Diamond M, (1997) Sexual identity and sexual orientation in children with traumatized or ambiguous genitalia. *Journal of Sex Research* **34** (2 May): 199-222.
7. Diamond MT & Sigmundson HK, (1997), Sex reassignment at birth. Long term review and clinical implications. *Archives of Pediatrics and Adolescent Medicine* **151**: 298-304.
8. Di Ceglie D, (2000) Gender identity disorder in young people, *Advances in Psychiatric Treatment*, **6**:458-466.
9. Ekins R, (1997); *Male Femaling*. London, New York, Routledge, 185 pages.
10. Ekins R & King D, (2001) Telling body transgendered stories in *Unseen Genders: Beyond the Binaries*, editors: F Haynes & T McKenna. Peter Lang, New York.
11. Green R & Fleming DT, (2000); Transsexual Surgery Follow-up: Status in the 1990s, *Annual Review of Sex Research*, editor J Bancroft, **1**:163-174.
12. Green, R (1987) The "Sissy Boy Syndrome" and the Development of Homosexuality. New Haven CT, Yale Univ.
13. Green, R (1999) Cited in *Bellinger v Bellinger*, Ct of Appeal, para 32 July 17th (Judgement,2001)TLR 22-11-2000
14. Green R, & Young R, (2001) Hand Preference, Sexual Preference, and Transsexualism. *Archives of Sexual Behavior* **30**:565-574.
15. Grossmann, R, Jurkevich A, Kohler A. (2002) Sex dimorphism in the avian arginine vasotocin system

- with special emphasis to the bed nucleus of the stria terminalis. *Comp Biochem Physiol A Mol Integr Physiol* **131**(4):833-7.
16. Imperato-McGinley J, Guerrero L, Gautier T, and Peterson RE. (1974). Steroid 5 α -Reductase Deficiency in man: An inherited form of male pseudohermaphroditism. *Science* **27**, 1213-1215.
17. Imperato-McGinley, J. Peterson RE, Gautier T, Sturia E. (1979a) Male pseudohermaphroditism secondary to 5 α -reductase deficiency-a model for the role of androgens in both the development of the male phenotype and the evolution of a male gender identity. *Journal of Steroid Biochemistry*, **11**(1B):637-645.
18. Imperato-McGinley J, Peterson RE, Stoller R, and Goodwin WE. (1979b). Male pseudohermaphroditism secondary to 17 β -Hydroxysteroid Dehydrogenase Deficiency: Gender role change with puberty. *Journal of Clinical Endocrinology and Metabolism* **49**, 391-395.
19. Kawata M (1995) Roles of steroid hormones and their receptors in structural organization in the nervous system. *Neuroscience Research* **24**:1-46.
20. Kipnis K and Diamond M. (1998) Pediatric ethics and the surgical assignment of sex. *Journal of Clinical Ethics* **9**(4):398-410.
21. Kruijver FPM, Zhou J-N, Pool CW, Hofman MA, Gooren LJJ, Swaab DF. (2000) Male to female transsexuals have female neuron numbers in a limbic nucleus. *Journal of Clinical Endocrinology and Metabolism* **85**(5):2034-2041.
22. Landén M (1999). Transsexualism, epidemiology, phenomenology, aetiology, regret after surgery, and public attitudes. PhD Göteborg University.
23. Mayer-Bahlburg HFL, Gruen RS, New MI, Bell JJ, Morishima A, Shimshi M, Bueno Y, Vagus I, Baker SW. (1996) Gender change from female to male in classical congenital adrenal hyperplasia. *Hormones and Behavior* **40**:319-332.
24. Miller MA, Vician L, Clifton DK, Dorsa D. (1989) Sex differences in vasopressin neurons in the bed nucleus of the stria terminalis by in situ hybridization. *Peptides* **10**(3):615-9.
25. Prosser J. (1998) *Second skins: The body narratives of transsexuality*. New York, Columbia University Press. 270 pages.
26. Reiner WG, Associate Professor, Division of Pediatric Urology, Johns Hopkins Medical Institutions, featured speaker at NYU Child Study Center Grand Rounds Summary September 29, (2000) *The Genesis of Gender Identity in the Male: Prenatal Androgen Effects on Gender Identity and Gender Role*.
27. Reiner, WG. (1999). Assignment of sex in neonates with ambiguous genitalia. *Current Opinions in Pediatrics* **11**(4):363-365.
28. Rösler A & Kohn G. (1983) Male pseudohermaphroditism due to 17 β -hydroxysteroid dehydrogenase deficiency:

studies on the natural history of the defect and the effect of androgens on the gender role. *Journal of Steroid Biochemistry* **19**(1):663-674.

29. Swaab DF, Chung WCJ, Kruijver FPM, Hofman MA, Ishunina TA. (2001) Structural and functional differences

in the human hypothalamus. *Hormones and Behavior* **40**:93-98.

30. Swaab DF, Chung WCJ, Kruijver FPM, Hofman MA, Hestiantoro A. (2003) Sex differences in the human

hypothalamus in the different stages of human life. *Neurobiology of aging Suppl* **1**:S1-16; discussion S17-9.

31. Ward OB, Ward IL, Denning JH, French JA, Hendricks SE. (2002) Postparturitional testosterone surge in male

offspring of rats stressed and/or fed ethanol during late pregnancy. *Hormones and Behavior* **41**:229-235.

32. Whitten PL, Patisaul HB, Young LJ. (2002) Neurobehavioral actions of coumestrol and related isoflavonoids in

rodents. *Neurotoxicology and Teratology* **24**:47-54.

33. Zhou J-N, Hofman MA, Gooren LJG, Swaab DF. (1995) A sex difference in the human brain and its relation to

transsexuality. *Nature* **378**:68-70.

Funded by Gender Identity Research & Education Society, the King's Fund & the BCC Trans Group
The King's Fund bears no responsibility for the text

Appendix 4
Sample SRS Consent Form
(from <http://www.gires.org.uk>)

B(7) - INFORMED CONSENT for GENDER CONFIRMATION SURGERY
(may be used in conjunction with NHS or other hospital consent forms)
(Trans woman)

.....

[Print name in full]

[address]

.....

.....

.....

..... [postcode]

I agree that I have had the implications of gender confirmation surgery explained to me in full by the Surgeon,(name of Surgeon). I have had this form for at least eight (8) weeks and I have had the opportunity to discuss the effects of this surgery with my surgeon.

I understand that the capacity to reproduce will be lost, irreversibly, unless I have taken steps to store sperm, or I am intending to undergo surgical removal and storage of testes during surgery. I have been given information about these possibilities.

I identify as **female** and I understand that my gender confirmation surgery may include orchidectomy, penectomy, labiaplasty, vaginoplasty with clitoroplasty, that is, the removal of external genitalia and the creation of a vagina, clitoris and labia minora and majora. The aim of the surgery will be to create an acceptable female cosmetic appearance, a functional vagina and, possibly, to retain sexual sensation.

I understand that in this operation:

- A vagina is created by making a space between the rectum and the prostate gland, and lining this with skin from the penis and scrotum. The erectile tissue from the penis is largely removed as are the testicles; this is completely irreversible.
- The urethra and its orifice are placed in a position to approximate to female anatomy. Labia minora and majora are fashioned out of penile and scrotal skin.
- An innervated clitoris can be fashioned out of the glans penis if requested. However, if this option is not initially performed, it cannot be performed later.
 - I understand that this is serious and extensive surgery and that there may be surgical complications requiring follow-up treatment.

Possible problems associated with surgery:

- Whilst creating the space between the prostate and the rectum, either the rectum or the urethra may be damaged. This could cause difficulty with control of the bladder or bowels or could lead to a fistula (communication) between the rectum and the newly created vagina. This would allow leakage of the bowel contents through the vagina. If such damage is recognized at the time of surgery, a temporary colostomy (bringing part of the bowel to the surface of the tummy) might be performed. If

the complication occurred later, further surgery may be needed.

- The skin lining the new vagina is taken from the penis or scrotum, and may not have sufficient blood

supply and may, therefore, become infected and die which would cause the vagina to become too small.

Despite all post-operative care and precautions, the new vagina may prolapse. There is greater risk of

this happening in the first three months post-operatively. Further surgery may be required to correct this.

- The pelvis, which is narrower in the male skeleton than in the female, governs the width of the newly

created vagina, so that it too will be narrower.

The process of shortening the urethra (the tube which carries urine out of the body) sometimes causes a

stricture, or healing may be asymmetric. This may result in difficulty in passing urine or may cause the

urinary stream to be at an awkward angle. If the problem is sufficiently severe, further surgery may be

required.

- If infection occurs, the labia may be scarred which could mar the cosmetic result.

• If an innervated clitoris is to be created, this could have insufficient blood supply and die, or it may not have any sensation, or it may be so sensitive as to be quite painful. If this occurs, it may have to be denervated or removed. This would seriously impair or prevent altogether the ability to achieve orgasm. It should be noted, however, that painful sensation may disappear after one or even two years.

- I understand that post-surgery I will need to continue hormone medication but, possibly at a reduced level.
- I understand that the removal of my male sexual organs is, effectively, irreversible. Reconstructive surgery cannot fully reinstate my pre-operative condition. I will remain infertile
- I understand that smoking increases the health risk of any surgery
- I understand that major surgery carries risks of deep vein thrombosis, pulmonary embolism, post operative chest infections etc.
- I understand that dilation and douching of the vagina is essential after-care.
- I am over 18 years old.
- I have read this document and I consent to undergoing the surgery as outlined above.

Signed.....date
 (Patient)

• I am satisfied that understands the nature of the proposed treatment and has a full understanding and appreciation of the consequences of both the treatment in terms of intended and possible side-effects and, also, the possible consequences of failure to treat.

Signed..... date
 (Surgeon)

• I authorise the engagement on my behalf of an anaesthetist and other physicians if necessary. (I agree to take part in any anonymised follow-up surveys)

Signed.....
date.....

Gender Identity Research and Education Society Tel: 01372-801554; Email:
bernardgi@aol.com

References

- American Medical Association. (2002). *Informed consent*. Retrieved March 4, 2004, from <http://www.ama-asn.org/ama/pub/catagory/4608.htm>
- American Psychiatric Association (Ed.). (2000). *Diagnostic and statistical manual of mental disorders*, 4th edition, text revision. Washington, DC: American Psychiatric Association.
- American Psychological Association. (2002). *Ethical principles of psychologists and code of conduct*: APA.
- American Society for Bariatric Surgery. (2001). *Rationale for the surgical treatment of morbid obesity*. Retrieved February, 12, 2004, from <http://www.asbs.org/html/rationale/rationale.html>
- Bailey, J. M. (2003). *The man who would be queen: The science of gender bending and transsexualism*. Washington D. C.: Joseph Henry Press.
- Blanchard, R. (1989). The concept of autogynephilia and the typology of male gender dysphoria. *The Journal of Nervous and Mental Disease*, 177(10), 616-623.
- Blanchard, R. (1991). Clinical observations and systematic studies of autogynephilia. *Journal of Sex & Marital Therapy*, 17(4), 235-251.
- Brown, M. L., & Rounsley C. A. (1996). *True selves*. San Francisco, CA: Josey-Bass.
- Bullogh, V. L. (2001). *Transgenderism and the concept of gender*. Retrieved October 1, 2002, from <http://www.symposium.com/ijt/gilbert/bullogh.htm>

Califia, P. (2003). *Sex changes: Transgender politics*. San Francisco, CA: Cleis Press.

Cohen-Kettenis, P., T., & Gooren, L. (1999). Transsexualism: A review of the etiology, diagnosis and treatment. *Journal of Psychosomatic Research*, 46(4), 315-333.

Colborn, T., & Clement, C. (1992). *Chemically-induced alterations in sexual and functional development-- the wildlife/human connection*. Princeton, N.J.: Princeton Scientific Pub. Co.

Conway, L. (2002). *How frequently does transsexualism occur?* Retrieved October 23, 2003, from <http://ai.eecs.umich.edu/people/conway/ts/tsprevalance.htm>

Conway, L. (2004). *An investigation into the publication of J. Michael bailey's book on transsexualism by the national academies*. Retrieved March 14, 2004, from <http://ai.eecs.umich.edu/people/conway/TS/LynnsReviewOfBaileysBook.html#anchor69193>

Conway, L. (2004). *Ts woman success links and photos*. Retrieved February 13, 2004, from <http://ai.eecs.umich.edu/people/conway/TSSuccesses/TSSuccesses.html>

Coolidge, F. L., Thede, L. L., & Young, S., E.,. (2002). The heritability of gender identity disorder in a child and adolescent twin sample. *Behavioral Genetics*, 32(4), 251-257.

- Craig, B. M., & Tseng, D. S. (2002). Cost-effectiveness of gastric bypass for severe obesity. *The American Journal of Medicine*, 113, 491-498.
- Dallas, D. E. (1998). *Current concepts in transgender identity*. New York, NY: Garland Publishing.
- Di Ceglie, D. (1998). *A stranger in my own body: Atypical gender identity development and mental health*. London, England: Karnac Books.
- Dittman, M. (2003). Chronic second-guessing jeopardizes mental health. *Monitor on Psychology*, 35(5), 15.
- Dorner, G., Gotz, F., Plagemann, R. L., Peters, H., & Ghanaati, Z. (2001). Genetic and epigenetic effects on sexual brain organization mediated by sex hormones. *Neuroendocrinology Letters*, 22, 403-409.
- Ettner, R. (1999). *Gender loving care: A guide to counseling gender-variant clients*. New York, NY: W. W. Norton & Company.
- GenderPsychology.org. (2004). *Everything you never wanted to know about autogynephilia*. Retrieved March 12, 2004, from <http://www.genderpsychology.org/autogynephilia/index.html>
- George Darby Pope, John D. Birkmeyer, R.G., S., & Finlayson, M. D. (2002). National trends in utilization and in-hospital outcomes of bariatric surgery. *Gastrointestinal Surgery*, 2002(6), 855-861.
- Gooren, L. (1993). *Transsexualism, medicine and law*. Paper presented at the The Council of Europe: 23rd colloquy on European Law:.
- Green, R. (1966). Mythological, historical and cross-cultural aspects of transsexualism. *Cited in Dallas (1998)*.

- Green, R., & Keverne, E. B. (2000). The disparate aunt-uncle ratio in male transsexuals: An explanation invoking genomic imprinting. *Journal of Theoretical Biology*, 202, 55-63.
- Green, R., & Young, R. (2002). Fingerprint asymmetry in males and female transsexuals. *Personality and Individual Differences*, 29, 933-942.
- Haraldsen, I. R., Opjordsmoen, S., Egeland, T., & Finset, A. (2003). Sex-sensitive cognitive performance in untreated patients with early onset gender identity disorder. *Psychoneuroendocrinology*, 28, 906-915.
- Hausman, K. (2003). Controversy continues to grow over DSM's GID diagnosis. *Psychiatric News*, 38(14).
- Hettena, S. (2000, 5/13/2000). Study questions 'sex reassignment. *Associated Press*.
- Hoffman, D. J., Rattner, B. A., Burton, A. G., & Cairns, J. (2003). *Handbook of ecotoxicology* (2nd ed.). Boca Raton, FL: CRC Press.
- Hsu, L. K. G., Sullivan, S. P., & Benotti, P. N. (1997). Eating disturbances and outcome of gastric bypass surgery: A pilot stud. *Eating Disorders*, 21, 385-390.
- International journal of sexuality and gender studies*. (Vol. 5)(2000). New York, N.Y.: Kluwer Academic/Human Sciences Press.
- Gender Identity Research and Education Society. (2002). *Definition and synopsis of the etiology of adult gender identity disorder & transsexualism*. Retrieved February, 2, 2004, from www.gires.org.uk
- Gender Identity Research and Education Society. (2003). *Draft guidelines for*

- health organizations in the treatment of gender identity disorder and transsexualism*: Retrieved February, 2, 2004, from www.gires.org.uk
- James, A. (2004). *Categorically wrong? A bailey-blanchard-lawrence clearinghouse*. Retrieved March 14, 2004, from <http://www.tsroadmap.com/info/bailey-blanchard-lawrence.html>
- John Hopkins Medical Center. (2000). *Hopkins research shows nature, not nurture, determines gender*.
- Johnson, C. (2002). *Endocrine disruptors and the transgendered*. Retrieved October 28, 2002, from <http://www.transhealth.com/iss4vol1/endocrine.htm>
- Jonathon, B. (2004, 1-23-2004). Boys surgically altered, raised as girls identified as males, report shows. *The Baltimore Sun*.
- Jones, L. (1996). *Transsexualism: The current medical viewpoint*. Retrieved November 5, 2002, from <http://www.pfc.org.uk/medical/medview.htm>
- Kaldera, R. (2001). *Hermaphroditism: The transgender spirituality workbook*: Xilbris Press.
- Kruijver, F. P., Zhou, J. N., Pool, C. W., Hofman, M. A., Gooren, L. J., & Swaab, D. F. (2000). Male-to-female transsexuals have female neuron numbers in a limbic nucleus. *The Journal of Clinical Endocrinology & Metabolism*, 85(5), 2034-2041.
- Lambda Literary Foundation. (2004). *The man who would be queen has been removed as a 16th annual lambda literary award finalist*, from <http://www.lambdalit.org/Lammy/BaileyBook/Baileyaction.html>

- Lawrence, A. A. (2000). *Sexuality and transsexuality: A new introduction to autogynephilia*. Retrieved March 5, 2004, from <http://www.annelawrence.com/newintroagp.html>
- Lawrence, A. A. (2003). Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. *Archives of Sexual Behavior*, 32(4), 299-315.
- London, D. (2002). Gender - the final frontier.
- Lurvey, L. D., Nager, C. W., & Johnson, D. D. (1996). Informed consent: A review. *Primary Care Update*, 192-199.
- McLachlan, J. A. (2001). *Environmental hormones : The scientific basis of endocrine disruption*. New York, N.Y.: New York Academy of Sciences.
- Medscape. (2004). *As a non-mental health professional, do you sometimes treat adults or adolescents for mental health conditions or do you always refer them to mental health professionals?* Retrieved February 16, 2004, from <http://www.medscape.com/px/instantpollservlet/result?PollID=1022&BackURL=/px/instantpollservlet/result?PollID=1022>
- Meyerowitz, J. (2002). *How sex changed: A history of transsexuality in the United States*. Cambridge, MA: Harvard University Press.
- Mirels, H., L., Greblo, P., & Dean, J., B. (2002). Judgmental self-doubt: Beliefs about one's judgmental prowess. *Personality and Individual Differences*, 33(5), 741-758.
- Niedermayer, G. C. (2001). *Waddayaknow, i'm not nuts!* Retrieved January 12, 2004, from <http://www.trans-health.com/iss2vol1/bstc.htm>

- Parens, E. (Ed.). (1998). *Enhancing human traits: Ethical and social implications*. Washington D. C.: Georgetown University Press.
- Pope G.D., Birkmeyer J.D., & S.R., F. (2002). National trends in utilization and in-hospital outcomes of bariatric surgery. *Journal of Gastrointestinal Surgery, 6*, 855-860.
- Rathe, R. (1996). *Occam's razor*. Retrieved March 3,, 2004, from <http://www.medinfo.ufl.edu/year1/bcs/interv/occam.html>
- San Francisco Aids Foundation. (1997). *Unique challenges for the transgender community*. San Francisco, CA: San Francisco Aids Foundation.
- Sigusch, V. (1997). Transsexualism: State-of-the art and clinical management. *Nervenarzt, 68*, 870-877.
- Swan, N., & Gooren, L. (2000). *Gender dysphoria*. Retrieved November 5, 2003, from <http://www.abc.net.au/rn/talks/8.30/helthrpt/stories/s171717.htm>
- The Harry Benjamin International Gender Dysphoria Association. (2001). *The Harry Benjamin International Gender Dysphoria Association's standards of care for gender identity disorders, sixth version*.
- United States Government. (2002). Supplement 1. *Environmental Health Perspectives, 110*, 27.
- Whitehead, D. (2004). *Penile enlargement options*. Retrieved February 14, 2004, from <http://www.penis-enlargement-options.com/surgery.htm>
- Wilkinson, L. (1999). Statistical methods in psychology journals. *American Psychologist, 54*(8), 594-604.
- Zhou, J. N., Hoffman, M. A., Gooren, L. J., & Swaab, D. F. (1995). A sex

difference in the brain and its relationship to transsexuality. *Nature*, 378, 68-70.

Zucker, K. J., Beaulieu, N., Bradley, S. J., Grimshaw, G. M., & Wilcox, A. (2001).
Handedness in boys with gender identity disorder. *Journal of Child
Psychology and Psychiatry*, 42(6), 767-776.