IOWA FOUNDATION FOR MEDICAL CARE

GENDER DYSPHORIA PROJECT

REPORT

FOR THE

IOWA DEPARTMENT OF HUMAN SERVICES

November 10, 1993

DEFINITION, DIAGNOSIS, AND TREATMENT OF GENDER DYSPHORIA

A Literature Review
for the
IOWA DEPARTMENT OF HUMAN SERVICES

INTRODUCTION

On October 7, 1993, the Iowa Department of Human Services (DHS) requested the Iowa Foundation for Medical Care (IFMC) perform a literature review concerning the effectiveness of sex reassignment surgery for the treatment of gender dysphoria. As part of this special project, the IFMC was to search the available medical literature and prepare a report addressing the following questions:

- Is the surgical treatment considered effective?
- Is the surgery considered experimental or investigational for treatment of the condition?
- Is surgery considered the only effective treatment for the condition?
- Is there any controversy in the medical community regarding the efficacy or appropriateness of surgery?, and
- Are there definitions of transsexualism and/or gender dysphoria used in the literature that do not depend on a person's "desire for surgery"?

Data banks contained in the National Institute of Health's Library of Medicine (NLM) were used for this search. The following data bases comprised the search:

- the Grateful Med online reference for articles and books,
- MEDSTAT database regarding sources of medical statistics, and
- the Medical Consult computerized database.

These sources were also contacted:

- the National Center for Health Statistics,
- the National Institute for Mental Health,
- the American Psychiatric Association,
- the University of Minnesota School of Medicine's Program in Human Sexuality,
- the Health Insurance Association of America and individual insurance companies,

- the California Health Care Financing Administration Regional Office,
- the Baltimore Health Care Financing Administration's statistical information line,
- the International Foundation for Gender Education,
- the American Education Gender Information Service, and
- the Harry Benjamin International Gender Dysphoria Association.

Researchers have identified the concept of gender identity as the sense of being male or female, and gender role as those things a person says or does to disclose him/herself as male or female. There are various theories on the possible causes for Gender Identity Disorders including genetics, family dynamics, social forces, and hormonal causes, but none of the findings are.

Controversy and evolution surround the definition, diagnosis, treatment, and study of Gender Identity Disorders (GIDs). The term "transsexualism" has existed since 1949 to describe one of the GIDs. Hersen and Turner (1991) indicate that the development of a sex conversion surgery for men wanting to live as women heightened public and professional awareness of the issue. The term first appeared in the American Psychiatric Association's Diagnostic and Statistical Manual, third edition (DSM-III) in 1980. The DSM-III-Revised edition (DSM-III-R) in 1987 included the classification gender dysphoric for patients who do not meet criteria for transsexualism. The systematic study is relatively new, consisting of just over 25 years.

DEFINITION

The definitions of the various GIDs have undergone evolutionary changes reflecting research conducted in the area.

The DSM-III-R states the essential feature of gender identity disorders is an "incongruence between assigned sex...and gender identity. Gender identity is the sense of knowing to which sex one belongs... Gender identity is the private experience of gender role, and gender role is the public expression of gender identity."

GID, as defined in the Comprehensive Glossary of Psychiatry and Psychology, is "a psychosexual disorder in which a person feels discomfort with and inappropriateness of his or her biological sex, with a marked preference for the clothing and activities of the opposite sex and/or repudiation of the sex organs". This book defines transsexualism as a "gender identity disorder in which a person has a desire to be of the opposite sex. Some transsexuals, many of whom have adopted the role of the opposite sex since childhood, have successfully undergone sex-changing

surgical procedures, accompanied by intensive hormonal therapy and psychotherapy".

Adams and McAnulty (1993) describe gender dysphoria as a gender identity disturbance; a disturbance in the subjective experience of his/her sex.

DIAGNOSIS

Diagnostic classifications, like the GID definitions, have experienced an evolutionary process since their inclusion in the literature. Revisions, deletions, reclassifications, and additions of GIDs have occurred in each of the APA's DSM editions. Work on DSM-IV is in progress and there is indication that more revisions are forthcoming.

The DSM-III-R lists four Gender Identity Disorders:

- 302.60 Gender Identity Disorder of Childhood,

  "The essential features of this disorder are persistent and intense distress in a child and the desire to be, or insistence that he or she is, of the other sex." In a small number of cases the disorder becomes continuous with transsexualism or Gender Identity Disorder of Adolescence or Adulthood, Nontranssexual Type (GIDAANT).

  There are no statistics concerning the prevalence of this disorder but it is reported as uncommon.

- 302.50 Transsexualism

  "The essential features of this disorder are a persistent discomfort and sense of inappropriateness about one's assigned sex in a person who has reached puberty. In addition, there is persistent preoccupation, for at least two years, with getting rid of one's primary and secondary sex characteristics and acquiring the sex characteristics of the other sex." Requests for sex reassignment through surgical and hormonal means may be made by these people because they find their genitals repugnant. There may be cross-dressing in both Transvestic Fetishism and GIDDAANT "but unless these disorders evolve to transsexualism, there is no wish to be rid of one's own genitals".

  Moderate to severe personality disturbance frequently coexists with this disorder, as well as anxiety and depression.

The estimated prevalence is one per 30,000 for males and one per 100,000 for females, according to the DSM-III-R. In Adult Psychopathology and Diagnosis, Second edition, the incidence is reported to have risen from 1 in 100,000 men and 1 in 400,000 women during the 1960s to 1 in 18,000 men and 1 in 54,000 women in 1988. The increase was attributed to "a lower threshold for applying for and commencing sex conversion".

- 302.85 Gender Identity Disorder of Adolescence or Adulthood, Nontranssexual Type (GIDAANT)

  "The essential features of this disorder are a persistent or recurrent discomfort and sense of inappropriateness about one's assigned sex, and persistent or recurrent cross-dressing.....either in fantasy or actuality, in a person who has reached puberty."

  The prevalence is unknown but the disorder "is probably more common than transsexualism". Brown (1990) reports that the prevalence of severe gender dysphoria is ten times higher than transsexualism. The DSM-III-R adds that a small number of these people want to live permanently as the other sex as years pass and the disorder may evolve to transsexualism.

- 302.85 Gender Identity Disorder Not Otherwise Specified

  These disorders that are not classifiable under specific GIDs.

  The ICD-10 Classification of Mental and Behavioral Disorders has five classifications for GIDs: transsexualism, dual-role transvestism, gender identity disorder of childhood, other gender identity disorders, and gender identity disorder - unspecified. The descriptions closely follow those from the DSM-III-R, however, this source places GIDAANT under the classification of dual-role transvestism. It defines this disorder as "the wearing of clothes of the opposite sex for part of the individual's existence in order to enjoy the temporary experience of membership of the opposite sex, but without any desire for a more permanent sex change or associated surgical reassignment".

  All experts reporting in the reviewed literature agreed that assessment of the patient must be thorough. Because many patients are well-read and may be more knowledgeable about the disorders than their general psychiatrists, the practitioner needs to complete all portions of an in-depth assessment, interviewing family members, friends, and available records. Brown (1990) reports that several "sex change surgery hopefuls

have hired surrogate mothers to pose as a natural parent" to provide false past history to assist the patient in pleading the case for sex reassignment surgery. Lothstein (1981) reported that nearly all patients with gender dysphoria will attempt to convince the practitioner evaluating them that they are truly transsexuals and require hormonal treatment and sex reassignment surgery.

Adams and McAnulty (1993) teach that "assessment is the technological implementation of a classification system". The most common methods include interviews, questionnaires, and other self-report methods. There are problems with these methods, however, in that self-report measures vary with individual biases and motivation.

The International Foundation for Gender Education (IFGE) estimates there are 300,000 persons in the United States who could be classified as having some type of gender dysphoria. About ten percent of them could be classified as transsexuals (prior to sex reassignment surgery). If the number of transsexuals who had completed sex reassignment surgery were included, the percentage may rise as high as 20 percent.

CLINICAL TREATMENT OPTIONS

A variety of options are available for treatment of persons with gender dysphoria. Leaders at the University of Minnesota's Gender Dysphoria Clinic specify a range of options available for the patient from integration of cross-gender feelings with the role congruent with his/her given sex, to living part time or full time in the opposite sex role, to hormonal and/or surgical sex reassignment. The clinic considers hormonal and SRS separately when gender reassignment is chosen. It "makes no assumption that hormonal sex reassignment must be followed by sex reassignment surgery".

In "Intake Assessment of Gender-Dysphoric Patients", Steiner cites three general factors that influence recommendations after an initial assessment: 1) clinical impression of the severity of dysphoria; 2) whether and to what extent the individual has been living in the cross-gender role; and 3) presence of other psychological or physical conditions which affect candidacy.

Adams and McAnulty (1993) noted that some transsexuals assume the cross-gender role by permanently cross-dressing and establishing themselves in their communities as members of the opposite sex. They may initiate hormone intake to acquire desired secondary characteristics. Only "a percentage of transsexuals will seek gender-reassignment surgery".

Hormonal Sex Reassignment

This therapy is the long-term treatment with the opposite sex hormones (estrogen/progesterone and testosterone) to allow the patient to approximate the appearance of the opposite sex. This type of treatment is both diagnostic and therapeutic in that "some patients who initially believe themselves to be transsexual have a markedly dysphoric response to treatment and find they do not truly want to undergo physical transformation" (Brown, 1990). He also indicates that hormonal therapy should ideally be initiated by a therapist only after an ongoing psychotherapeutic relationship of at least 3-12 months.

In "Clinical Management of Nontranssexual Patients", Stermac indicates that although controversy still exists about the use of hormonal therapy for nontranssexual gender dysphoric patients, some (particularly middle-aged or older) men have been treated successfully with estrogens. The effect has been a tranquilizing effect and a relief of anxiety.

Psychotherapy

Individual, group, and combination psychotherapy is often provided for gender dysphoric individuals. The University of Minnesota School of Medicine operates a Gender Dysphoria Clinic through its Program in Human Sexuality. It provides psychological support services to persons with gender dysphoria through individual and group therapy. The Minnesota program does not perform sex reassignment surgery. The program spokesperson was unable to provide statistics concerning the number of persons in treatment at the clinic or any statistics concerning effectiveness of the treatment. However, the clinic does provide supportive services to preoperative and postoperative patients.

Bockting and Coleman describe the comprehensive treatment model in place at the University of Minnesota's Gender Dysphoria Clinic in "A Comprehensive Approach to the Treatment of Gender Dysphoria" (1992). There are five treatment tasks:

- assessment (interview, testing, physical exam),
- management of co-morbid disorders (psychotherapy, chemical dependency treatment, pharmacotherapy),
- facilitating identity formation (individual or group psychotherapy, seminars),
- sexual identity management (individual and group psychotherapy, seminars), and
- aftercare.

- facilitating identity formation (individual or group psychotherapy, seminars),
- sexual identity management (individual and group psychotherapy, seminars), and
- aftercare.

In the "Clinical Management of Nontranssexual Patients" (1990), Stermac states that there are two groups for which nonsurgical treatment is indicated: ego-dystonic homosexuals who have difficulty accepting homosexual feelings and may interpret them as desires to be the opposite sex, and gender-dysphoric transvestites. She writes that psychotherapy may be helpful for the first group in that there is often a crisis associated with the "coming out" process.

Stermac (1990) advocates that marital counseling is appropriate and necessary for patients who are experiencing difficulties in relationships. (This therapy is usually sought after the spouse discovers cross-dressing, or the patient fears discovery by his/her spouse or children.)

Sex Reassignment Surgery (SRS)

SRS is performed to effect close approximation of the opposite sex's form and function. In males, the testes are removed, and a neovagina is formed. Cosmetic procedures include laryngeocartillage shaving, augmentation mammoplasty, abdominoplasty, and rhinoplasty. For females, the SRS includes mastectomy, hysterectomy, oophorectomy, contouring of a male chest and phalloplasty.

The first SRS was reported by Abraham in 1931. Brown (1990) reports that 1,000 of these surgeries may have been performed in the United States in 1980 alone. The International Foundation for Gender Education (IFGE) estimates between 1,000 and 2,000 SRSs are performed in the United States yearly; the total number of United States SRSs is between 10,000 and 15,000. The IFGE indicates that exact figures for statistical tracking are difficult to obtain for these reasons: patient paranoia, fear of being reported in tabloids or publicly identified, and lack of reporting of related surgeries (hysterectomies, oophorectomies, breast reductions, etc.) by health professionals. Further, IFGE only monitors surgeons they know perform SRSs (estimated to be about 40 surgeons in the world).

In "The Terminology and Classification of Gender Identity Disorders" (1992), Pauly states that when the therapist makes a diagnosis of transsexualism it is not synonymous with the recommendation for SRS. There should be careful selection based on established criteria.

Criteria for selection of surgical candidates emerged in the 1970s through work performed largely by members of the Harry Benjamin International Gender Dysphoria Association. Other professionals have revised the criteria and a summary table is presented below as compiled by Brown (1990).

Criteria for the Selection of Gender Dysphoric Patients for Sex Reassignment Surgery

Good Candidates	Poor Candidates
Lifelong cross-gender identification. Inability to adapt to or live in assigned biologically congruent gender role. Capacity to pass effortlessly and convincingly in society. Not considered a fetishistic cross-dresser. First heterosexual experience, if present, was in early adulthood rather than adolescence. At least some college education. Demonstration of stability, holding same job for years, long-term relationships, etc. Willingness to accept and actively engage in psychotherapy pre- and post-operatively. Presence of adequate social and/or family support system. Completion of a program at recognized gender identity clinic, including 2 years of successful living and working in cross-gender role. At least 1 year of medically supervised hormonal treatment. Absence of any characteristics of "poor" candidates. After a long-term psychotherapy relationship, the therapist feels relatively comfortable in referring patient for sex reassignment surgery.	Absence of characteristics listed under "good" candidates. Active or recent thought disorder or affective disorder. Exclusively fetishistic use of cross-dressing. Recent identifiable major loss precipitating impulsive request for hormones and sex reassignment surgery. History of significant antisocial behavior. Multiple suicide gestures and attempts, including genital or breast self-mutilation. Active substance dependence. Lack of social and/or financial support system. Lack of funds to finance medical care and postoperative complications. Delusional and magical expectations of surgery. Circumvention of gender identity clinics and procedures, eg, illicitly obtaining hormones. After a long-term psychotherapy relationship, the therapist resists referring the patient for sex reassignment surgery even though the therapist has referred appropriate patients for this procedure.

In "The Real-life Test for Surgical Candidates", Clemmensen describes activities which are essential in order to prepare a patient for SRS. In the real-life test, which is endorsed by the Harry Benjamin International Gender Dysphoria Association, the patient must assume the role of the opposite sex for a period of one to five years. Criteria for the real-life test include:

- cross dressing at all times,
- adopting a new name,
- presenting him/herselve at all social interaction in the cross-gender role, including employment and school,
- altering documents (licenses, etc.)
- being free from evidence of psychosis or mental retardation,
- obtaining proof of divorce, if married,
- age of at least 21 years,
- hormone therapy for at least one year, and
- absence of serious health/medical conditions.

Combination - hormonal therapy and psychotherapy

Psychotherapy/supportive services should be provided when hormonal therapies are used to treat gender dysphoria according to most of the resources reviewed. At the University of Minnesota's Gender Dysphoria Clinic, psychiatrists and staff provide psychological support and therapy services to all persons who are receiving hormone therapy. They initiate hormonal therapy for selected individuals and follow patients who have been started on the hormone treatments by other physicians.

Combination of hormones, psychotherapy, and surgery

The American Psychiatric Association in its 1989 Treatment of Psychiatric Disorders Task Force Report recommends a protocol combining psychotherapy, hormone therapy, and SRS for treatment of carefully selected primary transsexuals, meaning transsexuals who have had GID since an early age.

EFFECTIVENESS OF TREATMENT OPTIONS

The DSM-III-R indicates "the long-term outcome of combined psychiatric, hormonal, and surgical sex reassignment treatment related to transsexualism is not well known". The inadequacy of reporting efficacy of treatment methods is echoed by associations involved with gender dysphoria. Follow-up is poor for the same reasons that incidence is difficult to grasp.

An editorial in the September 7, 1991, issue of Lancet states that while many outcome studies of gender reassignment have been undertaken none of them withstand critical scrutiny. The editorial reported a study conducted by Kuiper and Cohen-Kettenis regarding 55 male-to-female SRS recipients (all had a neovagina made) and 25 female-to-male SRS recipients (21 had undergone hysterectomy, oophorectomy, and breast reduction, but only four

had had phalloplasty) five years after surgery. The researchers cautiously concluded that SRS had a therapeutic effect. However, the Lancet editorial urged critical assessment and selection of candidates over a long period (at least one year) and adherence to the guidelines for SRS procedures.

Early researchers presented views that since no treatment is effective in modifying transsexualism, sex conversion is appropriate management. Others urge that the acceptance of that view would be premature since there have been studies which have reported successful response to psychodynamic or behavioral therapy (Lothstein, 1982). Still others argue that the size of the research that found these positive results was too small and the outcome poorly documented (Zucker, 1985).

Hersen and Turner (1991) indicate that transsexuals who are turned down for SRS because they are found unsuitable for the surgery for psychological, social, diagnostic, or other reasons are frequently not included in the transsexual diagnosis. The resultant highly selected surgical population skews data -- the selected subjects score high, showing above average intelligence and Minnesota Multi Phasic Personality (MMPI) scores show no psychopathology. Data are rarely provided on subjects rejected for SRS.

Blanchard, Steiner, and Clemmensen (1985) determined that gender reorientation, defined as that process by which an individual "achieves approximation of the status of the opposite biological sex" is helpful. The process includes adopting the preferred gender role in increasing situations, as well as hormonal, SRS, or combination interventions. Researchers point out that there is less outcome reporting available for conventional therapies compared to SRS since much of the published case reports concerning successful psychotherapy, etc., have been on children and adolescents who are too young to meet the requirement of reaching puberty to be diagnosed as transsexual.

Hormonal Sex Reassignment

Brown (1990) reports that recent studies support oral administration of ethinyl estradiol 0.1-0.5 mg/day or conjugated estrogen 7.5-10.0 mg/day for nontranssexual gender dysphoric males although conjugated estrogens are less likely to adversely affect the liver enzymes. Both medications seem equally effective in achieving breast growth, which requires continuous treatment for at least two years. Additional treatment affects include suppression of testosterone production, 25 percent reduction in testicular volume, suppression of spontaneous penile erections, feminization of body and facial hair, and stabilization of receding hairlines. Emotional stability

increases and the patient experiences a calming sense of inner tranquility. Long-term (greater than ten years) effects of hormonal therapy are not known.

Brown also reports that hormonal sex reassignment of phenotypic females entails the use of 200 mg of testosterone cypionate injected intramuscularly every two weeks. Treatment is given to cease menstruation (usually takes four months), increase the amount and coarseness of hair in the male pattern, increase muscle mass and strength, and increase clitoral size.

Asscheman and Gooren in "Hormone Treatment in Transsexuals" (1992) indicate that semisynthetic sex steroids are "indispensable tools in the sex reassignment and treatment" of transsexuals.

However, Bockting who heads the University of Minnesota's Gender Dysphoria program states that they are cautious about treating a patient with hormones since there is some evidence as reported by Morgan in 1978 that hormones will increase the desire for SRS. They prefer to treat the "dysphoric patient's despair" due to co-morbid psychological conditions with medications specifically designed for that purpose.

Sex Reassignment Surgery

There are problems assessing the outcome of SRS. A study was attempted by Kuiper and Cohen-Kettenis in 1988 where transsexuals who were considered ineligible for SRS and patients who decided after psychotherapy to refrain from SRS would be used as controls for 141 patients receiving SRS. The study did not come to fruition as the ineligible patients did not cooperate and the researchers could find no subjects who wished to refrain after psychotherapy.

Meyer (1983) indicates that approximately 90 percent of patients are unavailable for follow-up after SRS. There is a lack of controlled prospective follow-up studies so data are often a source of controversy. Tentative conclusions from Lundstrom (1984) indicate that 10-15 percent of the surgeries "end up in failure".

Blanchard (1985) found that, while the level of satisfaction is widely varied, the majority of transsexuals who had SRS express satisfaction with the outcome. The post-surgery satisfaction is correlated with pre-surgical adjustment and the operation's effectiveness. He also found that those who present with co-morbid psychopathology are less likely to benefit from SRS.

increases and the patient experiences a calming sense of inner tranquility. Long-term (greater than ten years) effects of hormonal therapy are not known.

Brown also reports that hormonal sex reassignment of phenotypic females entails the use of 200 mg of testosterone cypionate injected intramuscularly every two weeks. Treatment is given to cease menstruation (usually takes four months), increase the amount and coarseness of hair in the male pattern, increase muscle mass and strength, and increase clitoral size.

Asscheman and Gooren in "Hormone Treatment in Transsexuals" (1992) indicate that semisynthetic sex steroids are "indispensable tools in the sex reassignment and treatment" of transsexuals.

However, Bockting who heads the University of Minnesota's Gender Dysphoria program states that they are cautious about treating a patient with hormones since there is some evidence as reported by Morgan in 1978 that hormones will increase the desire for SRS. They prefer to treat the "dysphoric patient's despair" due to co-morbid psychological conditions with medications specifically designed for that purpose.

Sex Reassignment Surgery

There are problems assessing the outcome of SRS. A study was attempted by Kuiper and Cohen-Kettenis in 1988 where transsexuals who were considered ineligible for SRS and patients who decided after psychotherapy to refrain from SRS would be used as controls for 141 patients receiving SRS. The study did not come to fruition as the ineligible patients did not cooperate and the researchers could find no subjects who wished to refrain after psychotherapy.

Meyer (1983) indicates that approximately 90 percent of patients are unavailable for follow-up after SRS. There is a lack of controlled prospective follow-up studies so data are often a source of controversy. Tentative conclusions from Lundstrom (1984) indicate that 10-15 percent of the surgeries "end up in failure".

Blanchard (1985) found that, while the level of satisfaction is widely varied, the majority of transsexuals who had SRS express satisfaction with the outcome. The post-surgery satisfaction is correlated with pre-surgical adjustment and the operation's effectiveness. He also found that those who present with co-morbid psychopathology are less likely to benefit from SRS.

Pflafflin (1992) reports the percent of lasting regrets after SRS is about one percent in males-to-females and about one and one-half percent in females-to-males.

A study of male 13 heterosexuals, 15 transvestites, 13 preoperative transsexuals, and 13 postoperative transsexuals -- was conducted by Beatrice (1985). Results indicated progressive levels of psychological dysfunction and that SRS is not a panacea for psychological conflict. Indeed, Beatrice notes that the MMPI data suggest that SRS may precipitate a severe decline in functioning and is therefore not the treatment of choice. Beatrice advises intensive psychotherapy be provided.

Abramowitz (1986) reviewed 20 years of research on outcomes of SRS in his article in the Journal of Consulting and Clinical Psychology. He reported that the lack of control groups impedes evaluating effectiveness and outcome. Overall improvement rates were found to hover around two thirds. He summarized that effects of SRS were positively associated with dedication and commitment to gender reassignment by the treatment team, consistency in early-stage hormone administration, and extent of surgical modification. Poor outcomes have been associated with inadequate family support, older patients, inadequate self-support, inappropriate physique, and criminal record. There is also a greater incidence of depression among females-to-males who receive phalloplasty. That surgery continues to have a high rate of surgical complications and disappointments.

Clemmensen (1990) states that poor post-surgical outcome is related to the patient's inability to maintain full-time employment in the new gender role and post-operative regrets are associated with failure to complete the real-life test for a sufficient time. Dickey and Steiner (1990) write that less intensely dysphoric patients often self-select against SRS when confronted with various hurdles in establishing their new social identity during the real-life test.

Blanchard and Sheridan (1990) in "Gender Reorientation and Psychosocial Adjustment" summarize a review of literature and studies and conclude that "currently available evidence indicates that operated transsexuals improve both before and after surgery". They indicate the pre-surgical improvement reflects adopting the cross-gender role among friends and family, choosing a name, obtaining new documents, employment/school, hormone treatment, etc. The positive effects post-surgically reflect the "surgical simulation of the opposite sex phenotype".

Psychotherapy

Setting realistic goals is critical. Brown (1990) reports that while gender dysphoric patients often reject it in their drive for sexual reassignment, psychotherapy is beneficial pre- and post-operatively whether it is the primary treatment or an additional treatment in SRS candidates.

Lothstein and Levine (1981) reported a 70 percent adjustment to nonsurgical solutions for gender dysphoria, but there are not large-scale outcome-oriented research studies regarding the effectiveness of psychotherapy.

Stermac (1990) writes that long-term follow-up studies do not support the efficacy of using behavioral methods to "eliminate undesirable urges and behaviors". She cautions the reader regarding studies which use patient self-reporting in the evaluation of effectiveness since there is often a bias associated with self-reporting. She states that there are an increasing number of reports of positive effects of psychotherapy, which include assisting the patient to consider options and deal with stress and confusion.

Group therapy is used and believed effective by staff of the Toronto Gender Identity Clinic. This clinic gathers six to eight group members in two-hour weekly meëtings. Stermac (1990) reports the "curative" factors include education/ information, a feeling of universality (I'm not the only one with this problem), and instillation of hope (the patient sees others cope and succeed).

In the 1989 Treatment of Psychiatric Disorders - A Task Force Report of the American Psychiatric Association (APA) the segment entitled "Treatment of Primary Transsexualism" discusses psychotherapy. Only one case has been reported where psychotherapy has succeeded in making an adult male primary transsexual comfortable with his masculinity. The APA stated that the treatment of transsexualism is "one of the most controversial, and, in many ways, one of the more disappointing areas in psychiatry today". They cited two main reasons for the disappointment: 1) transsexuals frequently avoid psychotherapy as they avoid it as a barrier to fulfilling their desire for SRS; and 2) if transsexuals do consent to psychotherapy they have rarely found it helpful where longterm and profound discomfort has been the rule.

Combination Therapy

In "Hormone Treatment and Therapy" Dickey and Steiner (1990) report that in the gender reorientation process it should be emphasized that hormonal and surgical treatments are only final stages of the larger, complex therapeutic process. They report that hormonal treatment followed by SRS appears to be the most effective treatment available for carefully selected transsexuals.

Yvonne Cook-Riley of the IFGE stated that the treatment for gender dysphoria, after three years of therapy, is effective about 90 percent of the time in assisting individuals to adapt successfully to social and other interactions. She indicated that all types of treatment would produce the same rate of effectiveness given there is careful assessment and selection of appropriate treatment individualized to the patient.

EXPERIMENTAL STATUS AND COVERAGE ISSUES

The literature available for review does not specifically identify whether the SRS for treatment of gender dysphoria is experimental or not. In the preface to Gender Dysphoria: Interdisciplinary Approaches (1992), the editors state "the discussions indicate that more theoretical development and research, both qualitatively and quantitatively, is needed to increase understanding of the complex phenomena subsumed under the umbrella term gender dysphoria...".

The benefit package outlined in the September 7, 1993, working draft of the American Health Security Act of 1993 excludes investigational treatments (except as part of approved research projects) from payment. A staff person from the clinical center of The National Institute of Mental Health stated that SRS is not currently being researched through that institution.

Medical payment of the SRS is questionable. A representative from the Baltimore Medicaid division of HCFA reported he had no idea whether payment had been made under Medicaid for any SRS. A representative of the HCFA Regional Office in San Francisco, California, who works with financial aspects of the California Medicaid system reported that the California Medicaid program has never made payment for this type of surgery.

The IFGE reported that there has been payment for SRS through several private insurance companies, including Connecticut General, The Hartford, Mutual of Omaha, Prudential, Travelers, Blue Cross and Blue Shield (BCBS)

of Massachusetts, and BCBS organizations for other states. The coverage has been through plans where the individual had paid large premiums. It is uncertain whether Medicaid or Medicare has paid for any SRS; however, there has been payment for associated hospital, psychological, and hormonal treatments.

Follow-up calls to Mutual of Omaha, Connecticut General, BCBS of Massachusetts, and The Hartford Insurance companies revealed that all of their major medical policies for privately insured beneficiaries contain a specific exclusion for sex transformation. The contact for Mutual of Omaha was unable to provide information regarding coverage under group policies since groups have the option of including or excluding specific treatments in their policies. The representative from The Hartford vehemently stated that no such payment had been made under group or private policy and that both had standard exclusions for this SRS. She indicated that The Hartford had not made payment for any SRS on an exception basis.

Tom Musko from the Health Insurance Association of America stated that he was unaware of any specific coverage policies or language regarding SRS. Coverage depends on the language of a particular policy and treatment is generally paid for according to these criteria: medically necessary and prescribed by a physician.

Mate-Kole, Robin, and Freschi (1991) reported that SRS is a "cosmetic procedure and while there is evidence that the change in appearance is again associated with relief of dysphoria there are two differences between transsexuals and other cosmetic surgery applicants". The first difference is that the offending appearance is "normal" for the biological group the transsexual is assigned; the second is that there is a subgroup of transsexuals who perceive appearance differently than do other people. The authors advocate this is a new area for study.

Abromowitz (1986) concludes his review of 20 years of research by stating that we have yet to see replicative assessments used that would enable comparisons across studies.

REFERENCES

Abramowitz, S.: Psychosocial outcomes of sex reassignment surgery. Journal of Consulting and Clinical Psychology 54(2):183-189, 1986.

Adams, H., and McAnulty, R.: Sexual disorders. In Suther, P., and Adams, H.(Eds): Comprehensive Handbook of Psychopathology, (pp.563-577). New York. Plenum Press, 1993.

Asscheman, H., and Gooren, J. G.: hormone treatment in transsexuals, Bockting, W., and Coleman, Eli.: Gender Dysphoria: Interdisciplinary Approaches in Clinical Management. New York. Hayworth Press, 1992.

American Psychiatric Association: Diagnostic and Statistical Manual, Third Edition - Revised. Washington, D.C., American Psychiatric Association, 1987.

American Psychiatric Association: Treatments of Psychiatric Disorders, A Task Force Report of the American Psychiatric Association, Volume 1. Washington, D.C. American Psychiatric Association, 1989.

Beatrice, J.: A psychological comparison of heterosexuals, transvestites, preoperative transsexuals, and postoperative transsexuals. The Journal of Nervous and Mental Disease 173(6):358-364, June,1985.

Blanchard, R., Steiner, B., and Clemmensen, L.: Gender dysphoria, gender reorientation, and the clinical management of transsexualism. Journal of Consulting and Clinical Psychology 53(3):295-304, June, 1985.

Blanchard, R.: Preface. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Blanchard, R.: Gender dysphoria and gender reorientation. In Steiner, B.W.(Ed): Gender Dysphoria: Development, Research, Management (pp. 365-392). New York. Plenum Press, 1985a.

Blanchard, R., and Sheridan, P.: Gender reorientation and psychosocial adjustment. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Blue Cross and Blue Shield of Massachusetts: Personal Communication. Bethesda/Boston, 1993.

Bockting, W., and Coleman, Eli.: Gender Dysphoria: Interdisciplinary Approaches in Clinical Management. New York. Hayworth Press, 1992.

Brown, G.: A review of clinical approaches to gender dysphoria. Journal of Clinical Psychiatry 51(2):57-64, Feb., 1990.

Clemmensen, L.: The "real-life test" for surgical candidates. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Connecticut General Insurance Company: Personal Communication. Bethesda, Bloomfield, 1993.

Dickey, R., and Steiner, B.W.: Hormone treatment and surgery. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Editorial: Transsexualism. The Lancet 338(8767):603-4, Sept. 7, 1991.

Green, R., and Fleming, D.: Transsexual Surgery Follolwpup: Status in the 1990s. Bancroft, J., Davis, C., and Weinstein, D. (editors): Annual Review of Sex Research (1): 163-174. Lakemills, Iowa Society of Scientific Study of Sex, 1990.

Health Insurance Association of America: Personal Communication. Bethesda/Washington, D.C., 1993.

Health Care Financing Administration, San Francisco Regional Office: Personal Communication. Bethesda/San Francisco, 1993.

Health Care Financing Administration: Personal Communication. Bethesda/Baltimore, 1993.

Hersen, M., and Turner, S. (Eds): Adult Psychopathology and Diagnosis, Second edition. New York. John Wiley & Sons.

International Foundation for Gender Education: Personal Communication. Bethesda/Waltham, 1993.

Kaplan, H.I., and Sadock, B. J.: Comprehensive Glossary of Psychiatry and Psychology. Baltimore. Williams and Wilkins, 1991.

Kuiper, B., and Cohen-Kettenis, P.: Sex reassignment surgery: a study of 141 Dutch transsexuals. Archives of Sexual Behavior 17:439-457, 1988.

Lothstein, L.M., and Levine, S.B.: Expressive psychotherapy with gender dysphoric patients. Archives of General Psychiatry 38:924-929, 1981.

Lothstein, L.M.: Sex reassignment surgery: Historical, bioethical and theoretical issues. American Journal of Psychiatry 139:417-425, 1982.

Lundstrom, B., Pauly, I., and Walinder, J.: Outcome of sex reassignment surgery. Acta Psychiatry Scandia 70:289-294, 1984.

Mate-Kole, C., Robin, A., and Freschi, M.: Benefits of surgical reassignment as perceived by operated male transsexual patients. Gender Dysphoria, An International Journal of Gender Identity Disorders, Special edition 1(1):76, 1991.

Meyer, G.D.: Therapy of male gender dysphoria. Current Psychiatric Therapy 22:61-66, 1983.

Mutual of Omaha Insurance Company: Personal Communication. Bethesda/Omaha, 1993.

Pauly, I.: Terminology and classification of gender identity disorders. In Bockting, W., and Coleman, Eli.: Gender Dysphoria: Interdisciplinary Approaches in Clinical Management (pp 5-40). New York. Hayworth Press, 1992.

Pfafflin, F.: Regrets after sex reassignment surgery. In Bockting, W., and Coleman, Eli.: Gender Dysphoria: Interdisciplinary Approaches in Clinical Management. New York. Hayworth Press, 1992.

Rogers, A.: Legal implications of transsexualism. The Lancet 341(8852):1085-6, April 24, 1993.

Ross, M.W., Burnard, D., and Campbell, I.M.: Utility of the Gd scale for the measurement of gender dysphoria in males. Psychol Rep 63(1):87-90, Aug. 1988.

Steiner, B.W.: Intake assessment of gender-dysphoric patients. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

Stermac, L.: Clinical management of nontranssexual patients. In Blanchard, R., and Steiner, B.W.: Clinical Management of Gender Identity Disorders in Children and Adults, First Edition. Washington, D.C. American Psychiatric Press, 1990.

The American Health Security Act of 1993, unpublished working group draft. September 7, 1993.

The Hartford Insurance Company: Personal Communication. Bethesda/Atlanta, 1993.

Tsur, H., Borenstein, A., and Seidman, D.: Transsexualism. The Lancet 338(8767):603-4, Sept. 1991.

U.S. National Clearinghouse for Mental Health Information, National Institute of Mental Health, Personal Communication, Rockville, MD 1993.

University of Minnesota School of Medicine's Program in Human Sexuality, Gender Dysphoria Clinic: Personal Communication. Bethesda/Minneapolis, 1993.

Walker, P., Berger, J., Green, R., et al: Standards of care: The hormonal and surgical sex reassignment of GD persons. Archives of Sexual Behavior 14:79-90, 1985.

World Health Organization: ICD-10 Classification of Mental and Behavioral Disorders, Clinical Descriptions and Diagnostic Guidelines. Geneva. World Health Organization, 1992.