

ERRATUM

The first sentence on page 124 of Volume 15-1 should read as follows. "Persons who exhibit Klinefelter's syndrome are males on all physical and psychological criteria", although they may be technically regarded as imperfectly formed males."

THE LEGAL PROBLEMS OF SEX DETERMINATION

DONNA LEA HAWLEY*

In the last few years the question of sex determination and its legal effects has become an important issue in all areas of human endeavour. In the following article the author discusses the classification of sexual types and then studies the legal implications of sex determination.

I. INTRODUCTION

Individuals are classified as male or female at birth and are raised in the corresponding sex role usually without any investigation or question into their sex. Legal questions as to the sex of an individual only arise when some unusual physical condition of an individual is discovered, or when a person willingly undergoes "sex reassignment" surgery. Because the bipolarity of sex has always been assumed to be an absolute the law has never defined sex. Now that problems have arisen the courts are being asked to assist in the determination of sex of certain individuals. Medicine has considered this problem for a considerable time, but it is a new, and as yet, unanswered question for law.

II. CLASSIFICATION OF SEXUAL TYPES

Generally, it has been thought that there were two categories of sex in animals—male and female. Hermaphrodites and freemartins were known to exist, but they were relatively uncommon and of no consequence. Recent biological research has shown that the categories of male and female are not mutually exclusive, and that the criteria for sex determination are not completely reliable. There are many types of persons who may be called intersexes. This section of the paper will describe the sex categories into which humans may be classified, and the following section will discuss the tests which are used to determine into which category an individual is classified. Before that, however, it is important that a description of the sexual attributes of a normal human be presented.¹

A. Normal Sexual Characteristics

Physical sexual characteristics can be classified into chromosomal, gonadal, and secondary sexual characteristics. Chromosomal characteristics are the pattern of sex chromosomes in the cells of the body which generally are the same throughout the body, but may vary from one cell to another in some individuals who are "genetic mosaics." Gonadal characteristics are based on the gonads or reproductive organs possessed by an individual. The gonads include the testes and ovaries. Genital characteristics are determined from the genitalia or sexual organs of an individual—the penis or vagina. Secondary sexual characteristics are physical features which usually appear at puberty and are based on genetic and hormonal patterns. Such features as facial hair, voice, pattern of fat disposition, and breast development are included in secondary sexual characteristics.

* B.A., B.P.E., M.A., LL.B., articling with the firm of Matheson & Company, Edmonton, Alberta.

¹ The discussion of physiological, medical and psychological materials in this paper will be superficial and will be based on the author's interpretation of medical articles.

Generally, individuals come within a male or female pattern of the above characteristics and are so classified. Some individuals, although they fall within one or the other general classification, exhibit variations on the normal. These individuals, along with the sexual anomalies discussed below, create a range or spectrum of human sexual types.

1. *Normal types*^{1a}

(a) *normal males*

All human cells contain 46 chromosomes, or 23 pairs of chromosomes, including one pair of sex chromosomes. A male has one X and one Y chromosome, or an XY pair.² It is the presence of a Y chromosome that determines maleness, from a medical point of view. From the chromosomal viewpoint the sex of an individual is determined at the moment of conception when the sperm and ova unite to form a zygote. The development of the male gonads begins about nine weeks after conception, and the male genitalia is recognizable at about two months after conception.

A normal adult male has an XY chromosome pair; testes and a penis; and his secondary sexual characteristics include a deep voice, facial and body hair and a general masculine build.

(b) *normal females*

A normal female has an XX chromosome pair and is chromosomally a female at the moment of conception. The female gonads begin to develop slightly after nine weeks from conception, and the female genitalia can be recognized at about two months after conception. A normal adult female has an XX chromosome pair; ovaries, uterus and vagina; and her secondary sexual characteristics include a higher pitched voice than males, breasts, absence of facial hair and lighter or no body hair, and a general female body type.

2. *Variations of normal types*³

Some individuals although they are basically within the range of normal types, exhibit characteristics which take them beyond the normal range in one way or another. Usually these individuals can be easily classified as male or female and present no apparent legal problems.

(a) *Klinefelter's syndrome*

Individuals who exhibit Klinefelter's syndrome are sterile males who have 47 rather than 46 chromosomes.⁴ The extra chromosome is an X and this results in an XXY sex chromosome pattern. The Y chromosome, which determines maleness, produces testes and testosterone, but the second X chromosome may cause some breast development and a

^{1a} Bowman, Karl M. and Engle, Bernice, "Sex Offences: The Medical and Legal Implications of Sex Variation" (1960) 25 Law and Contempt Prob 292; Moore, "Recent Developments Concerning the Criteria of Sex and Possible Legal Implications" (1959) 31 Man. Bar News 104.

² Each parent contributes one of each pair of chromosomes to the child. The mother being an XX can contribute only an X (one or the other), while the father, being an XY, can contribute an X or a Y. It is the father therefore that determines the sex of the child since if the sperm contains an X it will result in an XX female, and if the sperm contains a Y it will result in an XY male.

³ This section is based on: Bowman, *supra*, n. 1a; Ormrod, "The Medico-Legal Aspects of Sex Determination" (1972) 40 Medico-Legal J 78; Ormrod, "Medicolegal Aspects of Sex Determination" (1975) 5 Forensic Science 1; Money, "Psychologic Findings Associated with the XO, XXY, and XYY Anomalies" (1971) 64 South Med. J., Suppl. 1, 59; Alexander, "Turner's Syndrome and Gerstmann's Syndrome Neuropsychologic Comparisons" (1966) 4 Neuropsychologia 265.

⁴ In this and other types of chromosomal variations an individual may receive none, one, two or more sex chromosomes from one or both parents which results in an abnormal number in the child.

feminized body form. Persons who exhibit Klinefelter's syndrome are males on all physical and psychological criteria^{4a}, and this aggressiveness is impulsive and uncontrolled, and often results in criminal convictions and

(b) XYY syndrome

Individuals who exhibit this syndrome are males who have 47 chromosomes, the extra one being an extra Y, thus producing XYY sex chromosome pattern. Once referred to as supermales, these individuals are taller than average and male by all physical criteria. The major factor which sets these individuals apart from normal males is the apparent psychological or personality irregularities which are present. These individuals are generally extremely aggressive^{4b}, and this aggressiveness is impulsive and uncontrolled, and often results in criminal convictions and imprisonment. They are also generally loners, have flighty or defective attention span, and may have homosexual or bisexual tendencies. The psychological problems associated with this syndrome appear to be capable of reversal by psychiatric treatment.

(c) Turner's syndrome

Individuals with Turner's syndrome are females with an abnormal genotype of 45 chromosomes. The missing chromosome is one of the sex chromosomes and results in an XO pattern. Because of the absence of one sex chromosome ovaries fail to develop, they do not usually menstruate and do not develop secondary sexual characteristics. Other congenital abnormalities are often present including small stature, malformation of fingers and toes, heart disease, and webbed (short thick) neck. Cyclic administration of estrogens can be administered to produce the development of secondary sexual characteristics.

(d) metafemales⁵

Some females possess an extra sex chromosome which results in an XXX pattern. These individuals were once referred to as "superfemales" but this term was rejected in favour of the more appropriate term metafemales (meta = beyond). Such women exhibit characteristics such as infantile external genitalia, a ceasing of the menstrual cycle at an early age, undeveloped breasts, and below normal intelligence. This condition appears to be rare.

(e) sexual precocity⁶

Sexual precocity is complete sexual growth and development in children. The cause is unknown but may be caused by hereditary factors, brain tumors, or tumors of the gonads, adrenal cortex or pineal gland. Girls under the age of nine and beginning as young as four or five, have early breast development, sexual hair and mature internal and external genitals, and may have menstrual cycles. Boys, under the age of ten, undergo rapid body growth at an early age, development of sexual hair and beard growth, adult external genitalia development, a deepening of the voice, possibly a presence of acne, and the occurrence of erections and nocturnal emissions. There may or may not be production of sperm. Both

^{4a} The author would like to thank Dr. Betty W. Steiner of the Clarke Institute of Psychiatry in Toronto who offered comments on this paper. Dr. Steiner is of the opinion that those with Klinefelter's Syndrome commonly exhibit such gender identity as transsexualism, bisexuality etc.

^{4b} Dr. Steiner has pointed out that the question of these patients' aggressiveness is being questioned as the original investigations were done on a criminal population.

⁵ *Supra*, n. 1a.

⁶ *Id.*

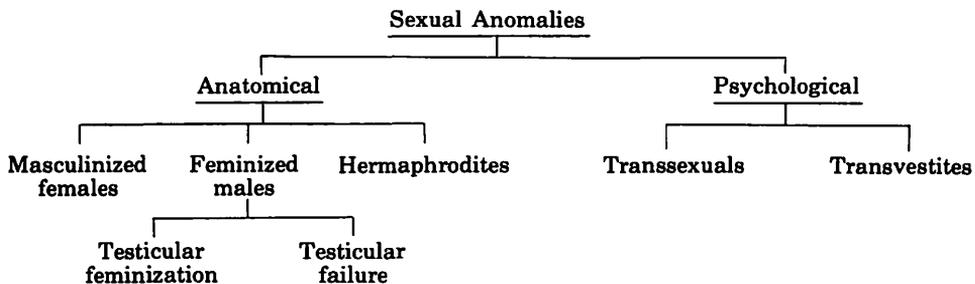
girls and boys with such early sexual development mature into normal adults. The only problem in this condition appears to be the social problems associated with having a young child appear to be a fully sexual adult.

(f) *Eunuchoidism*⁷

This condition occurs in both males and females and results when individuals fail to develop sexually at puberty. One frequent cause of this is failure of the pituitary gland to produce sex-stimulating hormones, and a second cause is failure of the gonads to function normally. Affected males usually have a very small penis and many have marked growth in their long bones which results in a form of gigantism. Affected females have an infantile vagina and uterus, lack other sex characteristics and are taller than average. Endocrine treatment can cause such individuals to develop in a normal pattern.

B. *Sexual Anomalies*

Sir Roger Ormrod has compiled a chart which sets out the relationship between the various sexual anomalies. This chart is:⁸



This chart shows that there are two types of sexual anomalies—**anatomical** and **psychological**. The anatomical anomalies can be discerned by an examination of the person who may display, to varying degrees, any number of sexual characteristics normally associated with either males or females. The psychological anomalies usually cannot be determined by any physical tests,⁹ but are based on the belief or desire of the individual. It is important to note that this classification does not include homosexuals. The reason is that homosexuality is not based on a physical or mental “mixup” in a person’s gender or sexual identity, but is based on a psychological preference for a sex partner of the same sex.

1. *Psychological Anomalies*

Psychological sexual anomalies¹⁰ are those conditions by which persons have a mental image of themselves which conflicts, to a greater or lesser extent, with their physiological sex. The cause of these anomalies is unknown, but some authors attribute them to genetics, hormones and environment, either separately or in various combinations.

⁷ *Id.*

⁸ Ormrod, (1972), *supra*, n. 3 at 83. Klinefelter’s syndrome was included under feminized males, but has been removed from the chart for this paper because it is felt to more properly be a variation of normal males rather than an anomaly.

⁹ If a person has undergone hormone treatment, a surgical modification or self-mutilation, then physical signs will be present.

¹⁰ These are referred to by some sociologists, and others as sexual deviations. While it is true that the behavior patterns of these persons deviate from those of the majority of society, this is not the major concern here. The importance to this paper is the manner in which this class of persons defines itself in relation to gender.

The anomalies which affect gender identity are transsexualism and transvestitism.

(a) *transsexualism*

Transsexualism¹¹—which has also been called gender identity disorder and cross-gender identity^{11a}—is classified as a psychological problem by an outsider, but the transsexual views it as a physical problem. In this condition a male individual feels that he is truly a female who has been “trapped” by some accident of nature, in a man’s body. The condition also affects women who feel that they are really men in a woman’s body, but statistically there are fewer women than men with this condition. These persons often develop such feelings at an early age. When puberty causes the development of secondary sexual characteristics, transsexuals are appalled at what is happening to their body and sometimes severe psychological strain results. These persons often want to undergo surgery, called “conversion operations” or “sexual reassignment” surgery^{11b}, so that their bodies will resemble those of the gender to which they feel they belong. There is no known “cure” for this condition, but surgery often has the effect of reducing the conflict in the individual’s mind.

Transsexuals may live their lives as members of the opposite sex, wearing the clothing, engaging in social behavior and obtaining employment normally associated with their chosen sex. Sometimes this is done quite successfully to outsiders, but it does not completely satisfy the transsexual himself. Transsexuals may sometimes engage in sexual relations with persons of their physical sex, but they do not consider this a homosexual relationship because they believe they are truly a member of the opposite sex.

(b) *transvestitism*

Benjamin¹² has said, in his classic book, that “. . . transvestites with their more or less pronounced sex and gender indecision may actually all be transsexuals, but in varying degrees of intensity.”¹³ This may be overstating the case based on the one similarity in the two conditions. Generally, transvestites are otherwise normal heterosexual men¹⁴ who have a compulsive desire to dress, on occasions, in women’s clothing resulting in sexual arousal. This is called cross-dressing, and it is not an uncommon condition. Sir Roger Ormrod describes a typical transvestite as follows:¹⁵

Most of the male transvestites live more or less normal masculine lives, many are married and have children and indulge in cross-dressing only occasionally. They have no wish to become female and are anxious to retain their masculinity, but they retain an intense excitement from wearing full female clothing and going about in public dressed as women. The condition is not by any means closely associated with homosexuality¹⁶

¹¹ This discussion is based on: Hamilton, “Gender: Quaestio quid Juris?” (1975) 15 *Med. Sci. Law* 79; Ormrod, (1972) (1975), *supra*, n. 1a; Bowman, *supra*, n. 1a; Moore, *supra*, n. 1a; Benjamin, *The Transsexual Phenomenon*, 1966, Ace Publishing Corp., New York.

^{11a} Dr. Steiner states that this is usually referred to as “gender dysphoria syndrome.”

^{11b} “Surgical sex reassignment” is the term preferred by Dr. Steiner.

¹² Benjamin, *supra*, n. 11.

¹³ *Id.* at 29.

¹⁴ This condition is apparently relatively rare in females.

¹⁵ Ormrod (1972), *supra*, n. 3 at 82.

¹⁶ This condition may be confused with homosexuality because some male homosexuals dress in women’s clothing and act as women on certain occasions as a manner of role playing for purposes within the homosexual subculture.

as is clearly demonstrated by those who lead apparently normal or fairly normal heterosexual lives.

This condition generally does not lead to the knowledge or involvement of any persons outside the individual's family, except by accidental discovery when the individual is picked up by a stranger or police in public, or is involved in an accident which requires medical treatment.

2. *Anatomical Anomalies*¹⁷

Anatomical anomalies are physical variations in an individual's body which exhibit some characteristics of both male and female in some degree. These can be caused by various hormonal or genetic influences and result in a number of recognized conditions that fill the spectrum between normal males and females.

(a) *hermaphrodites*

True hermaphrodites are not clearly of one sex or the other. They are generally considered to be persons who are chromosomal mosaics, that is, they have both XX and XY cells (sometimes called XX/XY syndrome). In these individuals both testicular and ovarian tissue is present. The genitalia is difficult to classify as either male or female since often an adequate vagina is present accompanied by a varying degree of clitoral enlargement which is sometimes considered to be a shortened penis.

Although hermaphroditism is rare, it is not by any means a condition which manifests itself in exactly the same way in each affected individual. A vagina may or may not be present and this feature is sometimes used to assign the individual to the female category. Other individuals are oriented as females during early childhood, but at puberty when changes in the testicular element produces more of the male hormone androgen, a masculinizing effect results. This may be the first actually recognized signs of the condition and may lead to problems in sex role assignment and treatment.

(b) *masculinized females*

Masculinized females are victims of what is called the "adrenogenital syndrome" or "adrenal masculinization". These individuals are chromosomally normal XX females, and have normal female gonads, that is ovaries, uterus and vagina. The condition is caused when a female fetus is exposed to excessive amounts of the male hormone testosterone, produced by tumors in the mother or in the fetus, or possibly because of inappropriate medication during pregnancy. The result is a masculinizing of the external genitalia which may result in an enlarged clitoris which appears to be a penis, and a fused *labia* which appears to be an empty scrotum. These changes lead to a wrong sex assignment at birth. Such children are usually raised as boys. Their true sex may be discovered when menstruation begins at puberty, but some individuals never discover their true sex and may marry as males, knowing they are sterile since no testes are present.

These individuals are medically female and effective treatment is available. Adrenal suppression will result from steroid therapy and surgery will remove traces of maleness by reconstructing the perineum and constructing a vaginal opening. Such correction and sex reassign-

¹⁷ The following discussion of anatomical anomalies was developed from the following sources: Bowman, *supra*, n. 1a; Ormrod, (1972), *supra*, n. 3; Ormrod, (1975) *supra*, n. 3; Hamilton, *supra*, n. 11.

ment is effective in children but may produce psychological and legal problems if performed on adults.

(c) feminized males

There are two categories of feminized males—the “testicular feminization syndrome” and the “testicular failure syndrome”. Both of these types are chromosomal XY males and gonadal males.

testicular feminization syndrome

In the testicular feminization syndrome an XY embryo develops as an apparent female possibly because of an insensitivity of the genital tissue to androgens. The Y chromosome causes development of testicular tissue, but the testes remain in the abdomen. This is the only masculine result of the Y chromosome. These individuals do not develop male genitalia, nor do they develop any male secondary sexual characteristics. Instead, they appear to be female. They have some breast development, female type genitalia which includes a somewhat shortened vagina, and in some cases an infantile uterus, but they do not menstruate since there are no ovaries present. Some of these individuals are capable of sexual intercourse as women.

There is no known remedy for this condition, but it does not appear to lead to problems, since the individuals are classified as female at birth and usually no question is ever made of their sex, since the signs of it do not appear physically.

testicular failure syndrome

This is similar to the testicular feminization syndrome except that evidence of masculinity may appear at puberty. This may lead to a reclassification of sex at that time depending on the role the individual has assumed and wishes to assume, and the degree of masculinization and feminization exhibited.

III. TESTS FOR SEX DETERMINATION

There are a variety of factors in determining an individual's sex. These factors have been established by the field of medicine, and some of them have been accepted by the law as tests which can be used to determine whether an individual is a male or female. The major tests, which have been established by medicine, are listed below.

A. Chromosomal test

As was seen above, the sex chromosomes determine the sex of each individual. Variations in the normal XY and XX pattern result in variations of the normal male and female type, or result in hermaphrodites if the individual is a genetic mosaic. It requires a complicated and difficult procedure to visibly examine the chromosomes of an individual and this is usually not a practical test. A relatively simple test was discovered in the early 1950's primarily by Dr. Murray

¹⁶ The factors involved in sex determination are discussed in: Ormrod, (1972), *supra*, n. 3; Ormrod, (1975), *supra*, n. 3; Bowman, *supra*, n. 1a; Hamilton, *supra*, n. 11; Dixon, “Sex Determination of Human Tissue” (1957-58) 4-5 J. of Forensic Med. 11; Valenti, “Prenatal Sex Determination” (1972) 112 Am. J. Obstet. Gynecol. 890; Moore, “Sex Determination, Sex Differentiation and Intersex Development” (1967) 97 Can. Med. Assoc. J. 292; Moore, “The Detection of Chromosomal Sex in Hermaphrodites from a Skin Biopsy” (1953) 96 Surgery Gyne. and Ob. 641; Mazzola, “Nuclear Sex Determination in Forensic Medicine” (1960) 42 Acta. Anat. 250; Edwards, “Recent Developments Concerning the Criteria of Sex and Possible Legal Implications” (1959) 31 Man. Bar news 115; Meyers, “Problems of Sex Determination and Alteration” (1968) 36 Medico-Legal J. 174; Renard, “Determination of Sex of Exfoliated Epithelial Cells and its Significance in Forensic Science” (1971) 11 J. For. Sci. Soc. 15.

Barr. When human cells, usually scraped from the mucous membrane of the mouth, are stained and examined under a microscope, darkly stained areas can be seen in female cells but not in male cells. This darkly stained area is the sex chromatin which is formed by the fusion of the two X chromosomes and is called the Barr body. The presence of a Barr body, therefore, establishes the presence of two X chromosomes, or a female pair. The absence of a Barr body shows that only one X chromosome exists in the particular cell examined, and it is assumed a Y chromosome is present, indicating a male person. This test is adequate for simple assessments but it will show various results as shown by the following chart.

Sex Chromosome Format	No. of Chromatin Bodies	Physical Appearance/ Phenotype	Apparent Nuclear Sex	Sex or Anomaly of Individual
XY	0	male	male	normal male
XY	0	female	male	feminized male
XO	0	female	male	Turner's syndrome
XX	1	female	female	normal female
XXY	1	male	female	Klinefelter's syndrome
XX	1	male	female	masculinized female
XXXY	2	male	female	Klinefelter's syndrome
XXX	2	female	female	metafemale
XX/XY	1/0	both	both	hermaphrodite

This chart shows that although determining the presence or absence of a Barr body will easily establish the sex of a normal male or female, it does not assist in determining the sex of any of the variations of normal sex. This test may not show the genetic mosaic pattern of a hermaphrodite unless a large enough sample of cells is examined. The test may also show a sex classification which is in conflict with the apparent or assumed sex of some individuals. The uncertainties of this test for individuals who are other than normal XX females or XY males, shows a need for support by other tests to determine the true sex of an individual.

B. Gonadal test

This test ascertains whether an individual has testes or ovaries. It involves an exploration of the abdomen and in some cases will include a histological examination of the gonad itself to determine if its microscopic structure is characteristically testicular or ovarian. The presence of testicular tissue or testes will indicate a male, while the presence of ovarian tissue or ovaries will indicate a female.

C. Genital test

Genitalia are the external sex organs; a penis is present on males and a vaginal opening on females. The appearance of external genitalia is used to determine the sex of a newborn infant and for this reason is a very important test. A child is raised in a particular sex role based on this sex assignment at birth. The problem with this test is that a cursory examination at the birth of an infant would result in the possibility of assigning feminized males, masculinized females and hermaphrodites to the "wrong" sex. This test is not valid, therefore, if used alone.

D. Sex hormones

Normally, testes produce male hormones and ovaries produce female hormones. The end product of sex hormones can be detected in urine. This

detection would determine what hormones are being produced (assuming none are added to the body by external means), and not necessarily what sex the individual is, since occasionally testes produce large amounts of female hormones, or the adrenal glands produce male hormones. The sex hormone test, therefore, is not a good indicator of the sex of an individual when used alone.

E. Secondary sex characteristics

The secondary sex characteristics usually agree with chromosomal, gonadal and genital sex and therefore present a reasonably reliable assessment of sex.

F. Social sex and sex role

This is the sex which is assigned at birth and in which the individual is socialized. The assignment is based on the appearance of the genitalia and thereafter this sex is the basis of the socialization process which is inflicted upon the individual by the parents, teachers and society as a whole. Normally an individual retains a sex role throughout life and his social sex can be determined to a certain extent by such things as dress, occupation, preference of sports and other activities and attitudes. In some cases of intersex individuals a new sex role is assumed at some stage in their life, because of either psychological or physiological developments. This change in sex role usually leads to social and psychological problems, and depending on the status of the individual at the time of the change, may lead to legal problems.

G. Psychosexual identity

This is the realization of the sexual self in the mind of the individual and is usually closely associated with, or results from the assigned sex role. As a test to determine the sex of an individual it is not decisive since its only basis is the psychological state of the individual which may not be reliable as evidenced by transsexuals.

H. Use of the tests

Each of the tests are based on only one criteria or factor of sex and therefore none, by itself, is capable of conclusively determining the sex of an individual. The tests must be applied in conjunction with each other. For normal males and normal females all tests will produce the same result and no problems will arise. This is not the case however for intersex individuals. The application of the tests will produce a variety of results, and individuals will be classified as male by some tests and as female by others. The way in which medicine and the law applies these tests varies and will be examined in the context of the discussion of legal problems below.

IV. LEGAL CONSEQUENCES OF SEX DETERMINATION

For a vast majority of persons there will never be any legal problems associated with determination of sex, but for those individuals who are classified as one of the forms of intersex the legal problems associated with this can be critical. It is fortunate for these individuals that legal problems do not seem to arise frequently. On the other hand, the infrequency of litigation on such problems tends to result in hardships to these individuals because there is a definite lack of either statutory or case law to provide answers to problems once they arise.

The major legal areas of concern are in registering vital statistics, criminal law, and matrimonial causes. Other less serious areas of concern include sex testing of women athletes, wills and succession, forensic use of sex determination, torts, contracts, and the question of the lawfulness of conversion surgery.

A. Registering Vital Statistics

All jurisdictions require the registration of births, deaths, marriages, dissolution of marriages, and other such information about those persons resident within the jurisdiction, or the ceremonies or events which occur within the jurisdiction. Government registry offices are governed by statutes which set out the information required and the prescribed forms by which the information must be registered. Correction of errors is generally permitted, and presents little or no problems when an error has been made in the classification of a child's sex at birth. If the sex of a child was indeterminate at birth and later found to be opposite to that on the registry, application can usually be made to have the error corrected.¹⁹

Problems arise, however, when there has not been an error in diagnosis of sex at birth, but there has been a subsequent change brought about by conduct, hormones or surgery later in life. In Scotland it has been held that the act governing the vital statistics registry allows for the correction of errors made at birth but does not sanction changes which have subsequently occurred.²⁰ In the United States a minority of states have amended their vital statistics legislation to allow transsexuals to change their sex on the registry after conversion surgery, but a majority of others do not permit such changes.²¹

In Canada most provinces do not provide for a change of sex to be registered on the birth certificate of transsexuals who have undergone conversion surgery. Three provinces, however, have recently passed such legislation. In Alberta, legislation now provides the following:²²

21.1 Where any person has had his anatomical sex structure changed to a sex other than that which appears on his birth certificate, the Director, on production to him of

(a) two affidavits of two duly qualified medical practitioners, each affidavit deposing that the anatomical sex of the person has changed, and

(b) evidence satisfactory to him as to the identity of the person, shall,

(c) if the sex of the person is registered in Alberta, cause a notation of the change to be made on the registration thereof, and

(d) if the sex of the person is registered outside Alberta, transmit to the officer in charge of the registration of births and marriages in the jurisdiction in which the person is registered, a copy of the proof of the change of sex produced to the Director.

(2) Every birth or marriage certificate issued after the making of a notation under this section shall be issued as if the registration had been made with the sex as changed.

In British Columbia a similar new section provides:²³

21A. (1) Where a person in respect of whom transsexual surgery has been performed is unmarried on the date he applies under this section, the Director shall, upon application made to him in accordance with subsection (2), change the sex designation on the

¹⁹ E.g. see *X-Petitioner* [1957] SLT 61; Vital Statistics Act R.S.A. 1970, c. 384, s. 5.

²⁰ *X-Petitioner* [1957] SLT 61; also see discussion of this case in Smith, "Law, Professional Ethics and the Human Body" (1959) SLT 245, at 247.

²¹ See *Anonymous v. Weiner* 270 NYS 2d 319 (1966); and "Changing Sex on Birth Certificates" (1968) 205 J.A.M.A. 289.

²² The Vital Statistics Amendment Act, S.A. 1973, c. 86, assented to October 30, 1973.

²³ An Act to Amend the Vital Statistics Act, S.B.C. 1973, c. 160, assented to November 7, 1973.

registration of birth of such person in such a manner that the sex designation is consistent with the intended results of the transsexual surgery.

(2) An application under subsection (1) shall be made in the prescribed form by the person in respect of whom the transsexual surgery was performed, and shall be accompanied by

- (a) . . . the certificate of a medical practitioner, qualified and licensed to practice medicine . . . explaining the surgical procedures carried out and certifying that he performed the transsexual surgery on the applicant . . .
. . . and
- (c) the certificate of a medical practitioner who did not perform the transsexual surgery, but who is qualified and licensed to practice medicine in the Province . . . certifying that
 - (i) he examined the applicant;
 - (ii) the results of his examination substantiate the certificate of the practitioner who performed the transsexual surgery; and
 - (iii) the results of the transsexual surgery are in accordance with the requirements of the regulations.

(3) Every birth certificate issued after the registration of birth is changed under this section, shall be issued as if the original registration had been made showing the sex designation as changed under this section.

New Brunswick has amended their Health Act^{23a} as follows:^{23b}

52.1(1) Where a person has undergone transsexual surgery and is unmarried at the time he makes an application under this section, that person may make an application to the Registrar to cause a notation to be made on the birth registration of that person so that the registration is consistent with the intended results of the surgery.

52.1(2) A person applying for a change under subsection (1) may also apply to have his given name or given names changed.

52.1(3) The Registrar shall cause to be made a notation of the changes referred to in subsections (1) and (2) where the application is made in the form prescribed by the Registrar and is accompanied by

- (a) the certificates of two medical practitioners certifying that
 - (i) they examined the applicant, and
 - (ii) the results of the transsexual surgery are in accordance with the requirements of the regulations; and
- (b) evidence satisfactory to the Registrar as to the identity of the person making the application.

52.1(4) Every birth certificate issued after the making of a notation under this section shall be issued as if the registration had been made with the sex designation and names as changed.

These three provinces allow the sex of a transsexual who has undergone conversion surgery to be registered in the new sex as if this had always been the sex of the person. The effect of this change is retroactive as far as the appearance of the registry is concerned, but it could not be intended to be retroactive and affect events in the life of the individual which occurred before the registry was changed. The result of this legislation appears to be that persons who have undergone conversion surgery can be registered as a member of their adopted sex, as if they had always been of that sex, for all purposes, subsequent to the change in registration.

B. Criminal Law

There is no criminal sanction in Canada against persons who are transvestites or transsexuals and who appear cross-dressed in public. The only offences which could involve an element of cross-dressing are those for personation by which everyone is guilty of an offence who fraudulently personates any person, living or dead, to gain some advantage for himself or to disadvantage another.²⁴ These offences are

^{23a} R.S.N.B. 1973, c. H-2.

^{23b} S.N.B. 1975, c. 27.

²⁴ Criminal Code, R.S.C. 1970, c. C-34, ss. 361, 362, 363.

specific in nature and do not cover mere cross-dressing for personal satisfaction.

It has been suggested that the fact that a victim of those sexual offences which can be committed only against females²⁵ is a person included in one of the sexual anomalies and thus may not be a "normal female", can be used as a defence by the accused. Sexual intercourse is defined by the Criminal Code as: "For the purposes of this Act, sexual intercourse is complete upon penetration to even the slightest degree, notwithstanding that seed is not emitted."²⁶ This definition does not set out whether penetration must be of a female person, or if it may also be of a male person.²⁷ The definition also does not set out what part of the person's body must be penetrated. This definition has been judicially interpreted in a case involving a charge of sexual intercourse with a female under fourteen, *Regina v. Johns*,²⁸ as: ". . . for the purpose of sec. 3(6) of the Code sexual intercourse is complete upon the penetration of the *labia*, either *majora* or *labia minora*, no matter how little, even though the hymen was never touched nor is there any penetration of the vagina." Whether this definition applies only to the offence questioned in the case, or to the definition in general was not stated, but it probably defines a sexual act by a male with a female person for any of the sexual offences.

The next problem is—how is a female person to be defined? Neither the Code nor the cases define a female person, since it is probably assumed that this is so self evident that it requires no definition. However, since the knowledge of intersex individuals has developed, this problem may become real. If an accused who is charged with a sexual offence against a female, attempts a defence that the victim was not a female person but was one of the categories of intersex or a male, the courts will have to do one of three things. First, it can determine which test or tests be used to ascertain the sex of the victim and dismiss the charges if the victim is found not to be a female by these tests. This is clearly an unsatisfactory way to resolve the issue since it puts an unnecessary stress and hardship on the victim and would not satisfactorily answer the legal question. Second, the court may be able to convict the accused, if evidence established guilt, of lesser included offences that may apply, such as gross indecency, indecent assault or common assault. Third, assuming guilt is established, the court might convict the accused of the offence charged, using similar reasoning as that applied in *Regina v. Ladue*.²⁹ In this case the accused was convicted of indecently interfering with a dead body. He attempted to establish that he was not guilty because he did not know the woman with whom he attempted or had sexual intercourse was dead. Davey J.A., in his reasons for judgment in confirming the conviction, said that *mens rea*, or a guilty intention, is essential for a criminal conviction. If a person's mind is innocent he cannot be guilty of a crime. However, if a person intends to commit a crime, although not the precise crime charged, he will have the necessary *mens rea* for his

²⁵ *Id.*: rape s. 143; attempted rape s. 145; sexual intercourse with a female under fourteen s. 146; sexual intercourse with a feeble-minded, etc., female s. 148; indecent assault on a female s. 149; seduction of female between sixteen and eighteen s. 151; seduction of female under promise of marriage s. 152; sexual intercourse with stepdaughter, female employee, etc., s. 153; seduction of female passenger on vessels s. 154.

²⁶ *Id.* at s. 3(6).

²⁷ There are special sections for sexual offences committed by one male against another, and include buggery s. 155; and indecent assault on a male s. 156. Acts which are classified as acts of gross indecency, s. 157, may include sodomy, fellatio, cunnilingus and other acts, and may be performed by or with persons of either sex.

²⁸ (1956) 20 W.W.R. 92, 25 C.R. 153 (B.C. Co. Ct.), at 93.

²⁹ (1965) 45 C.R. 287 (Y.T.C.A.).

unlawful act in the circumstances of the case. All that was required for this offence was *mens rea* in its widest sense, and knowledge that the body was dead was not a specific ingredient of the offence. The defence of not knowing the woman was dead failed since it was not a specific ingredient requiring *mens rea*, and because if the woman was alive he would be guilty of rape, since he had the *mens rea* to perform the act he committed against her. It could be argued that specific knowledge that the person was female is not an essential ingredient of the sexual offenses, if the accused had the *mens rea* to commit the act against a female, and thought that he was committing it against a female, he would be guilty.

C. Matrimonial Causes

There are three major areas of the law of matrimonial causes which can be affected by sex determination; these are: marriage, nullity and divorce.

1. Marriage

The major questions in relation to sex determination and marriage are: whether or not the sex of the parties is an essential ingredient of marriage, and, if it is, what are the tests used to determine the sex of the parties? Marriage was defined in *Hyde v. Hyde and Woodmansee*,³⁰ by Sir J. P. Wilde (later Lord Penzance) as: ". . . the voluntary union for life of one man and one woman to the exclusion of all others." This definition has since been used as the definition of marriage in Canada. Among the many factors included in the definition is the requirement that the parties to a marriage be a man and a woman. There can be no valid marriage between two persons of the same sex. This was reaffirmed recently in Canada in *North et al. v. Matheson*.³¹ In this case two men purported to marry one another and went through a marriage ceremony and all other statutory requirements in relation to marriage. They then applied to have their "marriage" registered at the vital statistics office. When the registrar refused their application they brought an action seeking an order which would require such registration. The court dismissed their action, basing its decision partly on the definition of marriage in *Hyde v. Hyde and Woodmansee*. It was held that the ceremony was not a marriage ceremony but was a nullity, thus there was nothing to register.

There is no problem when the parties are a normal male and normal female. Problems may arise, on the other hand, when one of the parties comes within one of the intersex categories. *Corbett v. Corbett*³² is the only Commonwealth case which has looked specifically at this question. In this case the respondent in a nullity action was a man who had undergone conversion surgery prior to the marriage ceremony. Mr. Justice Ormrod found from the medical witnesses that there were at least four criteria for ascertaining the sexual condition of an individual. These were: (1) chromosomal factors, (2) gonadal factors, (3) genital factors, and (4) psychological factors. The court found that prior to surgery the respondent had an XY chromosome pair, had male genitalia and male gonads, but was psychologically a transsexual. In deciding the case Mr. Justice Ormrod said:³³

³⁰ (1866) L.R. 1 P.&D. 130, 35 L.J.P. 57.

³¹ (1975) 20 R.F.L. 112 (Man. Co. Ct.).

³² [1970] 2 W.L.R. 1306.

³³ *Id.* at 1324-25.

Since marriage is essentially a relationship between a man and woman, the validity of the marriage in this case depends, in my judgment, upon whether the respondent is or is not a woman. . . . The question then becomes, what is meant by the word "woman" in the context of a marriage, for I am not concerned to determine the "legal sex" of the respondent at large. Having regard to the essentially hetero-sexual character of the relationship which is called marriage, the criteria must, in my judgment, be biological, for even the most extreme degree of transsexualism in a male or the most severe hormonal imbalance which can exist in a person with male chromosomes, male gonads and male genitalia, cannot reproduce a person who is naturally capable of performing the essential role of a woman in marriage. In other words, the law should adopt in the first place, the first three of the doctors' criteria, i.e., the chromosomal, gonadal and genital tests, and if all three are congruent, determine the sex for the purpose of marriage accordingly, and ignore any operative intervention. . . . My conclusion, therefore, is that the respondent is not a woman for the purposes of marriage but is a biological male and has been so since birth. It follows that the so-called marriage . . . is void.

By this case, therefore, a transsexual who has undergone conversion surgery cannot marry in the role of his assumed sex.³⁴ This case does not determine the validity of a marriage of a member of any of the anatomical anomaly categories, and this problem remains unresolved. Immediately after this case the English Parliament passed the Nullity of Marriage Act 1971, which provides:³⁵

1. A marriage which takes place after the commencement of this Act shall be void on the following grounds . . .

(c) that the parties are not respectively male and female.

It can be assumed that the tests set out in *Corbett v. Corbett* will be used to determine the sex of the parties to a marriage when this question arises under this Act.

In Canada a valid marriage is one which has the voluntary consent of both parties, is in compliance with the statutory requirements of solemnization, and where both parties have the capacity to marry in respect of age, physical capacity and degree of kinship.³⁶ One further requirement is that the parties must be a man and a woman.³⁷ There has been no judicial definition of sex in relation to marriage in Canada, and it is probable that *Corbett v. Corbett* would be strongly considered, if not followed, in cases involving transsexuals. Three enlightened provinces, however, have foreseen this question arising and have passed legislation to deal with it. Alberta, British Columbia and New Brunswick have amended their legislation to allow transsexuals who have undergone conversion surgery to have their birth certificates changed to show their new sex.³⁸ The result of this is that the person is legally, by statute, of their new sex, and it would appear that such a person could apply for a marriage licence and marry as a member of their new sex. The effect of this would possibly be that where there is a statutory definition of sex, the somewhat harsh tests in *Corbett v. Corbett* would not be applicable in similar cases.³⁹

³⁴ An interesting question would be if such a person could marry in the sex role which they had before such surgery, since they would no longer have the physical capacity to consummate the marriage.

³⁵ Nullity of Marriage Act 1971, (Imp.), c. 44.

³⁶ *Moss v. Moss* [1897] P. 263.

³⁷ Hahlo, "Nullity of Marriage" in *Studies in Canadian Family Law*, Vol. 2, ed. D. Mendes da Costa, Butterworths, 1972 at 651; *North et al. v. Matheson* (1975 19 R.F.L. 112 (Man. Co. Ct.)).

³⁸ See discussion under *Legal Consequences of Sex Determination*, *supra*.

³⁹ A recent American case (reported in the *Toronto Star*, Wed., March 2, 1976, at E4) held that a marriage between a transsexual who had conversion surgery and a man was valid as long as the husband knew of the sex change operation, and that the transsexual was entitled to support payments on breakup of the marriage.

2. Nullity

An action for nullity of marriage goes to the issue of the validity of marriage, and arises from grounds which exist at the time the marriage was entered into, and dissolves the marriage to its formation by a decree that it is *void ab initio*. There are, generally speaking, two categories of grounds for nullity: those which go to capacity and those in respect of formalities of the marriage ceremony. These grounds are governed by different levels of government in Canada.⁴⁰ The federal government has exclusive authority to legislate in respect of "marriage and divorce",⁴¹ while the provincial governments have exclusive jurisdiction over "the solemnization of marriage in the province."⁴² The result of this is the federal government has jurisdiction to legislate in respect to capacity to marry, while the provincial governments have capacity only in respect to the formalities of solemnization of marriage.

The grounds which show a lack of capacity include: a prior existing marriage; a relationship within the prohibited degree of kinship; non-age; insanity at the time of marriage; lack of consent of the parties; impotence; and both parties being of the same sex. The effect on the validity of marriage when both parties are of the same sex, or where one is a transsexual, was discussed above. The federal parliament has not passed any legislation in regards to capacity to marry, validity of marriages or nullity of marriage, and therefore, the common law provisions apply.

The solemnization of marriage is an important aspect of marriage since a marriage may be void for non compliance with the formal requirements. Each province has legislation dealing with the formalities of solemnization, and these provisions vary slightly from province to province.⁴³ The fact that a province has special legislative requirements for the solemnization of a marriage within that province does not necessarily mean that the province is usurping the federal government's control over capacity. If a requirement, which affects all marriages celebrated within the province and not those celebrated elsewhere, is an essential element of the ceremony of marriage itself, this will not be considered to deal with the capacity of the parties.⁴⁴ In a case in which the question was the distinction between the formalities of the ceremony of marriage and the status or capacity required by the parties, the court said: "Solemnization of marriage is not confined to the ceremony itself. It legitimately includes the various steps or preliminaries leading to it."⁴⁵ In this case the statute made it necessary that minors have parental consent in order to marry. This was held to be a matter dealing with preliminary steps only, and that it prescribed formalities by which the ceremony was to be celebrated. The requirement of consent was one of the forms to be complied with for the marriage ceremony, and it did not relate to capacity. This thinking may apply to the question of marriages in Alberta, British Columbia and New Brunswick of transsexuals who have undergone conversion surgery. The registration under the vital statistics legislation would be in the nature of a preliminary step leading to the ceremony, and thus a formality and not a matter of capacity. This

⁴⁰ See Scott, "Thrice the Blinded Cat Has Mewed" (1965) 11 McGill L.J. 356 at 359-67; Hahlo, *supra*, n. 37; Abel, *Laskin's Canadian Constitutional Law*, Carswell, (1973) at 882-900.

⁴¹ British North America Act (1867), 30 & 31 Victoria, c. 3, s. 91(26).

⁴² *Id.* s. 92(12).

⁴³ Hahlo, *supra*, n. 37.

⁴⁴ See *Kerr v. Kerr and A.-G. Ontario* [1934] S.C.R. 72; [1934] 2 D.L.R. 369.

⁴⁵ *A.-G. Alberta and Neilson v. Underwood* [1934] S.C.R. 635; [1934] 4 D.L.R. 167, per Rinfret J.

supports the contention that in Alberta, British Columbia and New Brunswick transsexuals who have undergone conversion surgery, and who have complied with the requirements of the vital statistics and marriage legislation, should be allowed to marry as members of their chosen sex.

3. Divorce

Divorce in Canada is governed by the Divorce Act⁴⁶ which applies throughout the country. There are only four grounds for divorce which could possibly be directly affected by the problem of sex determination or intersex classification. First, if one party to a marriage suffered from and practiced transvestitism, and this rendered future cohabitation intolerable to the other spouse, grounds of cruelty would exist.⁴⁷ Transsexualism would also probably be grounds for cruelty where it rendered intolerable the continued cohabitation of the spouses. Second, non-consummation because of disability for a period of one year gives rise to grounds for divorce.⁴⁸ Consummation requires *emissio seminis*, and erection and penetration are not enough.⁴⁹ An intersex who appears to be a male, or one who appears to be a female, may be incapable of consummating a marriage by reason of physical disability. This could give rise to grounds for divorce or for nullity. Third it might be possible to obtain grounds for divorce on the basis of adultery⁵⁰ or a homosexual act⁵¹ if one spouse had sexual intercourse with a person who was an intersex or a transsexual who may or may not have had conversion surgery. Probably the sex of the co-respondent would not be called into question, but if it were, adultery and a homosexual act could be pleaded as alternative grounds. Regardless of how the court determined the sex of the co-respondent, one of the grounds would apply since adultery has been defined as including "mutual intercourse"⁵² which can be less than penetration, and a homosexual act has been defined as including "mutual fondling which results in a sexual climax."⁵³ Therefore just about any sexual act could be classified within these broad definitions and give rise to grounds for divorce. It is also possible that such sexual conduct by the respondent may be grounds for cruelty.⁵⁴

D. Sex Testing Women Athletes⁵⁵

1. The Tests

Sex testing of women athletes was initiated in 1966 after the sex of some athletes was called into question.

The first test used was a superficial examination of the women athletes by three female gynecologists. The athletes were examined in

⁴⁶ R.S.C. 1970, c. D-8.

⁴⁷ Divorce Act, s. 3(d); C. v. C. (1971) 1 R.F.L. 127 (N.B.Q.B.); C. v. C. (1971) 2 R.F.L. 128 (Ont. S.C.); in England see *T. v. T.* (1961) 105 S.J. 933.

⁴⁸ Divorce Act, s. 4(1)(d).

⁴⁹ *Miller v. Miller* [1947] O.R. 213 (C.A.).

⁵⁰ Divorce Act, s. 3(a).

⁵¹ Divorce Act, s. 3(b).

⁵² *Sapsford v. Sapsford and Furtado* [1954] P. 394.

⁵³ *M. v. M.* (1972) 24 D.L.R. (2d) 114 (P.E.I.S.C.).

⁵⁴ See *Countway v. Countway* (1968) 70 D.L.R. (2d) 73 (N.S. Div. Ct.); *Spicer v. Spicer* [1954] 3 All E.R. 208.

⁵⁵ For a discussion of the development of this issue see: Moore, "The Sexual Identity of Athletes" (1968) 205 J.A.M.A. 787; "Sex fo Athletes" (1966) 2 Br. Med. J. 1255; "Introducing the, uh, Ladies" (1966) 198 J.A.M.A. 1117; "Preserving la Difference" Vol. 88, Time at 70, 16 Sept. 1966; "Who Goes There?" Vol. 70 Newsweek at 97, 25 Sept. 1967; "Are Girl Athletes Really Girls?" Vol. 63 Life at 63, July 1966; Gardner, "Women Put Men in the Shade" World Sports at 4, October 1966; Hay, "Sex Determination in Putative Female Athletes" (1972) 221 J.A.M.A. 998.

the nude and were merely required to walk by, then face the doctors. This test, which appears to be a genital test, was also used at the Kingston Commonwealth Games.

The test which is now used is the chromosomal test, which has been discussed above. This test, used alone, may not be the best indicator of sex, since it determines only one of the criteria of sex. A person with Turner's syndrome (although unlikely to compete in most sports) would fail this test, likewise an apparent female who is a case of testicular feminization would also fail. These two cases, represent individuals who are female in most respects (genitalia, secondary sexual characteristics, socially and psychologically) would be ineligible to compete. On the other hand, a woman who was a masculinized female, would pass the test (although she would be, by her social role, ineligible to take it) even though by a majority of tests she would be regarded as a male. Using this test, to its extreme end, would permit such masculinized females to compete, which would be as unfair as denying feminized males an opportunity to compete.

The chromosomal test is, at best, only one indicator of sex, when anyone but a normal XX female or XY male is being considered. The chromosomal test, therefore, must be used in conjunction with other tests, or be replaced by a combination of other tests, if a fair result is to be achieved. This has been realized by the British Commonwealth Games Committee. In 1978, the chromosomal test will be supported by a series of other tests whenever an individual does not pass the first test.

2. Legality of the Test

There has been some question as to the legality of requiring women athletes to submit to sex testing. Such a test would not be an assault, since the athletes submit to it, and thereby give consent. The fact that, if they wish to compete, they have no free choice to withhold consent would not destroy the consent. It is also true that parties may make a contract, for a legal purpose, containing any terms they wish. If competing in international competition is a contractual relationship, the facts that the parties are of unequal strength, and that one party sets the terms and the other must comply or not contract, does not affect the validity of such terms. Some suggestion has been made that requiring women to submit to sex testing is discrimination on the basis of sex. This argument would not likely be tenable since it is clear law that, throughout the Commonwealth and in many other countries, private clubs, societies and other organizations may reject an application for membership or refuse to reinstate a member on arbitrary grounds.⁵⁶ By rejecting an applicant on racial or sexual grounds a private club is merely exercising its legal right, and it is not violating the rights of the applicant in any way. Anti-discrimination statutes forbid sexual, and other, discrimination in places of public accommodation, but their terms do not cover private organizations. It may also be that such provincial or federal statutes do not apply to international sports associations. It appears, therefore, that a woman athlete who wishes to compete but who does not wish to undergo sex testing has no right to refuse, nor does she have any remedy in tort, contract or by anti-discrimination legislation if she refuses and is barred from competition.

⁵⁶ For a complete discussion of this see Avins, "Freedom of Choice in Organizations in the British Commonwealth" (1967) 13 McGill L.J. 309; also see Wex, "Natural Justice and Self-Regulating Voluntary Associations" (1972) 18 McGill L.J. 262.

E. Wills and Succession

The type of problem that could arise in the field of wills and succession is deciding what to do with property when a testator leaves property to "my son John" who at the time of probate has undergone sex conversion surgery, or who has been found to be an intersex who is really a female. Would the intended beneficiary take under such an instrument? Probably he would since the intended beneficiary can be identified and the intention of the testator is clear as to the person he contemplated receiving the property—i.e. his child that he called John. More of a problem may arise if the testator left specified property to "my eldest son", when his son has since assumed the role of a female for any of the above reasons. Would this person now be precluded from the definition of "eldest son"? It is possible, that the intended child would take under the will, because of the rules of interpretation of wills. When words of a will are ambiguous, or where they may be applied to some other person, the court will permit evidence to determine the intention of the testator as to which person he wanted to benefit.⁵⁷

F. Forensic Use of Sex Determination

Forensic use of sex determination arises on those rather infrequent occasions when an unidentified body or part of a body has been found. The cells may be examined to determine the sex of the individual in a search for his identity. If the individual was an intersex or a transsexual whose social and psychological sex was opposite to their chromosomal sex, forensic determination of chromosomal sex could be a bar to the discovery of the individual's identity since the authorities might be looking for a person of the wrong sex.

G. The Law of Torts

Generally tort law does not distinguish between males and females but there are some areas of this law which do. In personal injury awards occasionally men receive higher damages than women for similar injuries when the male and female plaintiff are of similar age and occupation.⁵⁸ Actions for loss of consortium have only been successfully maintained by a husband and not by a wife.⁵⁹ On the other hand, actions for breach of promise to marry would probably succeed only when brought by a woman.⁶⁰ Since the courts normally accept persons as male or female as they appear to the courts or as they represent themselves, the problems related to sex determination are unlikely to arise in tort cases. If a question arose as to the "true" sex of an individual it may have some effect on the outcome of a case, but in most instances it would be of little or no consequence.

⁵⁷ See Williams, *The Law Relating to Wills*, 3rd ed., Butterworths, 1967, at 410-11.

⁵⁸ Damage awards are calculated by considering a variety of often complex considerations and are usually based on a variety of heads of damage. Sex is only one small consideration in the assessment, but it is interesting to speculate whether it had a more important role in the calculation when some cases are considered. For example: \$12,000 was awarded for a fractured tibia and fibula causing no permanent damage to a 46 year old male in *DuBocquet v. Caron* (1975) 12 N.B.R. (2d) 283 (N.B.C.A.) while \$4,400 was awarded for fractures of the lower leg and collarbone causing scarring and requiring further surgery to an adult woman in *Therrien et al. v. White* (1975) 12 N.B.R. (2d) 541 (N.B.S.C.); \$8,500 was awarded to a school age girl for a scar on her chin which required corrective surgery in *Arsenault v. Magasins Continental Ltee* (1975) 12 N.B.R. (2d) 639 (N.B.S.C.) while an adult male was awarded \$2,400 for a laceration to his nose and eyelid, scar on the nose and a broken tooth in *Therrien, supra*; \$100,000 was awarded for the death of a 27 year old male school teacher in *Ralph and Snow v. Juimey* (1975) 7 Nfld. & P.E.I.R. 402 (P.E.I.S.C.) while \$10,000 was awarded for the death of a 23 year old female school teacher in *Alaffe v. Kennedy* (1973) 11 N.S.R. (2d) 457 (N.S.S.C.).

⁵⁹ *E.g. Welch and Downie v. Grant* [1936] 1 W.W.R. 312; 50 B.C.R. 388.

⁶⁰ *E.g.* of conduct courts allow of women without finding breach on their part see: *Reynolds v. Jamieson* (1889) 19 O.R. 235 (C.A.); *Bellamy v. Robertson* (1915) 8 W.W.R. 305, 21 D.L.R. 415.

H. Contracts

Since the passage of married women's property acts,⁶¹ there have been fewer restrictions on the capacity of married women to contract. Because of this it would be unlikely that a question of sex determination of a party to a contract would arise since, other than in a case of fraud, it would be of no consequence to the contract.

I. Lawfulness of Sex Conversion Surgery⁶²

There are three areas of law which may affect the legality of sex conversion surgery—contract, tort and criminal law.

If the surgery does not produce the exact desired physical or social results the patient may wish to sue the doctor for breach of contract. This would be fruitless, however, since doctors do not guarantee the results of their treatment and are not liable in contract when the patient is unhappy with the results.⁶³

In tort a doctor may be liable for assault (battery) if the surgery is undertaken without first obtaining a proper and valid consent from the patient. One important problem here is to determine if the patient has the capacity to give a valid consent. Transsexuals are suffering from a psychological disorder, which affects their thinking in the exact area in which surgery is to be performed. The question which arises from this is: Are they capable of giving a valid consent or are they incapacitated by reason of a mental illness? This question does not appear to be a bar to such surgery. Even if consent were an issue it would most likely not present a problem since transsexuals referred to a surgeon by a psychiatrist, who may even have recommended surgery as treatment.

Would such surgery be a crime? Section 45 of the Criminal Code protects doctors from criminal responsibility when surgery is performed for the benefit of a person with reasonable care and skill and with regard to the health of the person and all circumstances of the case. Doctors who perform sex conversion surgery carefully determine if it is for the benefit of the person since it is such a serious and irreversible process. If this is done, and the surgery is performed skillfully, it is likely that no criminal responsibility would follow.

J. Others

There are few other areas that might possibly create legal problems. Most employment is now governed by anti-discrimination legislation so that sex of an employee is of little consequence. It has been suggested that in defamation actions where a person's moral character is injured, it is of a more serious nature if the victim is a woman,⁶⁴ but with the changing nature of society this may no longer be the case.

V. CONCLUSION

The rapid changes in medicine have created a new awareness of the different sex and intersex categories. Even more rapid changes in society have created problems for those individuals who are classified within the categories of the sex spectrum. The legal problems that can and do

⁶¹ *E.g.* Married Women's (property Act, R.S.A. 1970, c. 227.

⁶² See Edwards, *supra*, n. 18; Strauss, "The Sex-Change Operation: Two Interesting Decisions" (1967) 84 S. Afr. L.J. 214; Meyers, *supra*, n. 18; *Corbett v. Corbett* [1970] 2 W.L.R. 1306.

⁶³ *Allard and Allard v. Boykowich* [1948] 1 W.W.R. 860 (Sask. K.B.).

⁶⁴ Ormrod, (1972), *supra*, n. 3.

arise from the fact that individuals are classified within one of the intersex categories are dealt with by rigid, cautious and sometimes antiquated laws. It is vital that legislative changes be made, as have been done in Alberta, British Columbia and New Brunswick to allow intersex individuals to be free from the crippling legal barriers that have arisen and which prevent them from living a normal social life.