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Transgender Health Care Part 1: Health Promotion

Systems Change Project
Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

St. Catherine University
St. Paul, Minnesota

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ST. CATHERINE UNIVERSITY
ST. PAUL, MINNESOTA

This is to certify that I have examined this
Doctor of Nursing Practice systems change project
written by

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and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by
the final examining committee have been made.

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DEPARTMENT OF NURSING

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Abstract

Primary care providers have reported an increase in the transgender patients seeking care in outpatient clinics; however, providers lack experience in caring for these individuals. As a result, the transgender patients are at risk for experiencing significant adverse events, dissatisfaction with healthcare, and potential death. Transgender population health promotion is necessary to improve overall quality of life. The transgender patients experience social and health inequities, and disproportionate obstacles compared to other populations. Provisions to ensure adequate health services for the transgender patient are necessary. This article focuses on health promotion aspects of transgender care, and will provide the primary care provider with an overview of caring for this unique patient population.

Introduction

Health care for transgender patients within the United States has been fragmented. Many have not received primary care services from their health care providers due to perceived stigmatization and discrimination related to conflicted gender identity disorders.^{1,2} Transgender patients have reported difficulty in finding a clinic and provider from whom they feel comfortable receiving care.³ In June 2011 a national directive was mandated for use throughout the nation's Veterans Administration (VA) systems.⁴ To fulfill this mandate there must be significant change and improvement in the care provided to transgender veterans. The transgender veteran population has been increasing in numbers within Veterans Administration Medical Centers (VAMC). Lack of sufficient skilled primary care providers has further marginalized this population in the health care system.² The purpose of this article is to delineate different vernacular to enhance provider understanding of gender identity and to improve the comfort and confidence levels of primary care providers who care for this population.

Common Transgender Vernacular

A sex is always assigned to us at birth. This term is often used interchangeably with the term gender, but technically sex is describing only physical phenotypic typical characteristics. Conventionally there are two options; male or female and for the rest of our lives this determines whether we live with masculine or feminine identity.

Gender is the social categories that are differentiated by its psychosocial characteristics and role expectations. Gender identity based on societal norms is assigned and grounded on sex. This assignment means a typical gender identity is associated with certain things (e.g. facial features, make-up) and physical characteristics (broader shoulder, longer limbs). Societal norms use these understandings for documentation in the electronic health record where the only available choices are male or female. However, gender is on a spectrum and one's sense of self as a gendered person (as man woman both or neither) cannot be labeled from outside, rather it is individuals who can truly define their gender. Gender identity may or may not match the natal sex or gender given at birth and may not conform to conventional expectations of maleness or femaleness. Change in gender identity can occur at any age as it is not permanent or fixed.

It is important to differentiate that conflicted gender identity is not the same as sexual orientation. Sexual orientation refers to physical and sexual attraction to the same or another gender. Sexual orientation is not based on gender identity or vice versa as each individual is unique. Therefore, it is important for healthcare providers to understand that the sexual orientation questioning is not necessary for a complete health and physical examination; however, it is important to identify age appropriate risk factors screening and counseling in a nonjudgmental way.

Transgender and Gender non-conforming

Transgender is an umbrella term for anyone whose gender identity does not match the sex or gender they were assigned with at birth; individuals often sense this is different at a very young age.⁵ Gender nonconforming means that an individual does not necessarily fall into a category of male to female or female to male. In other words, it may describe the way someone identifies when their gender identity does not match the definitions available or the definition society gives us. Many transgender or not gender conforming individuals feel that they do not fit in either the male or female category.⁶ The following definitions highlight different terms:⁷⁻¹¹

- Gender Identity: a person's innate, deeply felt psychological identification as male or female, which may or may not correspond to the person's body or designated sex at birth.
- Gender Expression: all of the external characteristics and behaviors that are socially defined as either masculine or feminine, such as dress, grooming, mannerisms, speech patterns and social interactions.
- Sexual Preference: an individual's physical and/or emotional attraction to the same and/or opposite gender. "Heterosexual," "bisexual" and "homosexual" are all sexual orientations.
- Gender Identity Disorder (GID): a conflict between one's gender identity and one's designated natal/birth sex.
- Gender Dysphoria: severe distress and discomfort caused by the conflict between one's gender identity and one's designated sex at birth.
- Gender Transition: the process through which a person modifies his or her physical characteristics and/or manner of gender expression to be consistent with his or her gender identity.

Patient Presentation

Samantha a 35 year old adult natal female is accompanied by her life partner Alex in clinic today. She is adopted and does not have any family medical information. Her medical history consists of several incidents of treated sexually transmitted diseases (STDs) with a history of multiple past sexual partners. She has not been to a health care provider for 7 years, presenting today to initiate primary health care. The last time that she was seen by a health care provider was for diagnosis and treatment for Chlamydia and Gonorrhea. At that time she was educated about STDs such as hepatitis or HIV. Since that time she denies any unprotected sexual contact. ***Samantha's*** history includes multiple episodes of attempted suicide, and until last year, she was an active "cutter". She verbalizes feeling relief of stress and anger after she cuts herself. She currently is seeing a psychologist who has diagnosed her with Gender Identity Disorder (GID). Samantha explains that she knew that she was born with the wrong "parts" pointing at her genitalia and breasts, and that, "None of this was a problem until about 12 years old and I began to develop breasts". She also said that she was forced to run away to survive, and that she was raped by her neighbor and couldn't go through that again. She recalls that she later joined the Marines to escape her life. She tells you that her relationship with Alex has given her the support and confidence needed to "come out" and transition to male. Past medical history includes posttraumatic stress disorder.

Physical Examination:

Vital signs within normal limits. The patient is alert, oriented, and pleasant, in no acute physical distress. Affect is appropriate and she is cooperative with exam, does not appear anxious or depressed. Complete physical assessment including gynecological and breast exam within normal limits. Abnormal finding noted for scarring on abdomen, inner arms, in popliteal fossa, and inner thighs bilaterally. No new wounds.

Laboratory Work-up:

Lipid Profile, CBC, CMP, HgbA1C and TSH P within normal limits. Pap with HPV-DNA negative. Substance abuse and domestic violence screening are negative.

Diagnoses:

Gender Identity Disorder
Gender Dysphoria

Treatment/Management

Continue Psychological Services. Pap and pelvic exam should be based on current guidelines. STD screening should be based on risks; Yearly mantoux and full skin exam. Ultrasound any breast tissue and lymph nodes every other year and lab testing based on guidelines.

Patient Education

Samantha is planning to transition to male. She plans to receive testosterone therapy. Precautions and contraindications were discussed, which included cardiac health and cancer screenings. Endocrinology, cardiology or hematology provider must clear her if she develops hyperlipidemia, elevated BP, kidney failure, prolactinoma, or active thyroid disease. Testosterone can impact lipids, therefore regular exercise and a balanced diet is important as overweight patients may have more difficulty achieving amenorrhea and masculinization. Post-oophorectomy patients may be at higher risk for osteoporosis, despite being on testosterone if they were at a very low estrogenic state as it may confer highest risk. Calcium and vitamin D supplements are recommended. Return yearly for chest wall exam or of any breast tissue and cervical cancer screening in next 5 years per guideline. Monitor BP every one to three months, and adult immunization (per CDC guidelines) to be completed with next clinic visits.

Discussion

For testosterone therapy informed consent is necessary. To receive this therapy it should be patient driven, with the provider facilitating informed consent to do no harm. Menses cessation should be tailored to the individual. Provider should have an honest discussion about the unknown effect of testosterone on ovaries and potential. Cardiology consult is appropriate for unstable heart disease. Considerations include risk stratification for diseases including hyperlipidemia, diabetes, liver impairment or chronic liver disease, cigarette smoking, active substance use, renal impairment, stable coronary artery disease, hypertension or congestive heart failure, valvular disease, extreme obesity, thyroid disorder or a strong family history of breast cancer, hyperlipidemia or diabetes. If patient has previously been taking thyroxin replacement for hypothyroidism, it is important to monitor TSH and free T4 closely as testosterone can affect thyroid binding globulin. Overall hormone therapy can impact the entire endocrine system. Testosterone can cause erythrocytosis, if elevated make sure testosterone levels are not above average male physiologic range. If this persists, consider switching to transdermal or slight decrease in the dosage. ***Osteoporosis screening*** female to male post-oophorectomy who are not on testosterone or on a low dose testosterone are especially at risk for osteoporosis. Female to male on aromatase inhibitors may also have low estrogen and therefore may be more at risk. Calcium and vitamin D supplements are recommended. Consider a DEXA scan early as a baseline and then within five years of gonad removal.^{5, 12-14}

Follow-up

Education and patient evaluation by trained medical and mental health providers are strongly recommended before initiating hormones or any surgical procedures. Ongoing physical and mental health monitoring by providers ordering treatment is also necessary to provide safe,

efficacious care.¹²⁻¹³ Written resources as well as reliable and factual web resources should be provided to patients.

Transgender Health Care Part 2: Grand Rounds

Patient Presentation/Patient History

The two patients discussed in this article, Chris and Jessy, are fictional patients in these scenarios. Any similarities with real people, conditions, and health descriptions are purely coincidental.

Chris, an adult natal male is a nineteen year old college student back home for summer break. He is dressed casually in jeans and a university sweatshirt. His family consists of his mother, age 57 with a history of obesity, diabetes, hyperlipidemia, cardiovascular atherosclerosis and previous tobacco use for 25 years. His father recently passed away and his medical history is unknown. He has one sibling, a healthy younger brother. Chris reports feelings of being born in the wrong body. As a youngster he knew that he was supposed to be female. He has done well in school but never felt connected with friends. Originally his mother and teachers thought that he had problems concentrating and they believed that it created barriers for him to create friendships. He had a few good female friends. Female and male peers called him names such as, "He-she" and "Queer." Chris has seen a mental health provider for Gender Identity Disorder (GID) and gender dysphoria. His mental health provider has recommended initiating hormone therapy. This letter recommends that his new provider, (that's you now), should feel safe to prescribe cross sex hormones to him. Chris does meet DSM4 criteria¹ for the diagnosis of gender Identity disorder. He seeks care today to begin treatment with hormones to transition to female. In the past he has felt hopeless and states, "he may cut off his own testicles to reduce his testosterone levels". Chris reports that normally he wears feminine clothing; however, today his attire is masculine as he didn't want others to stare at him in the clinic.

Physical Examination:

VITAL SIGNS: within normal limits (WNL).

GENERAL: The patient is alert, oriented, and pleasant, in no acute physical distress. Does not seem anxious or depressed. Appropriate and cooperative with exam.

HEENT: WNL.

NECK: WNL

CHEST: WNL

CARDIOVASCULAR: WNL

ABDOMEN: WNL.

GENITOURINARY: Normal circumcised penis without lesions. His testes are descended bilaterally without mass.

RECTAL: Normal resting and voluntary sphincter tone. His prostate is flat, firm, non-nodular, and non-tender.

NEUROLOGIC: No focal deficits. DTRs are intact.
MUSCULOSKELETAL: Normal bulk and tone. Ambulates without difficulty.
INTEGUMENT: WNL.

Laboratory Work-up

Lipid panel, CBC with platelets, CMP ordered². All of these lab results were within normal limits.

Diagnoses

Gender Identity Disorder
Gender Dysphoria

Differential Diagnoses DSM4 criteria for GID:

A strong and persistent cross-gender identification (not merely a desire for any perceived cultural advantages of being the other sex). In adolescents and adults, the disturbance is manifested by symptoms such as a stated desire to be the other sex, frequent passing as the other sex, desire to live or be treated as the other sex, or the conviction that he or she has the typical feelings and reactions of the other sex.

Persistent discomfort with his or her sex or sense of inappropriateness in the gender role of that sex In adolescents and adults, the disturbance is manifested by symptoms such as preoccupation with getting rid of primary and secondary sex characteristics (e.g., request for hormones, surgery, or other procedures to physically alter sexual characteristics to simulate the other sex) or belief that he or she was born the wrong sex.

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Based on the DSM4 criteria for hormone therapy are as follows:

1. Persistent, well-documented gender dysphoria; +
2. Capacity to make a fully informed decision and to consent for treatment; +
3. An adult of age 18, younger if emancipated; +
4. Medical or mental health concerns must be reasonably well controlled; as to not exacerbate existing co-morbidities, or induce additional health conditions. +
5. Patient must be willing and agree to informed consent. +

+ Denotes meets criteria. 0 Denotes does not meet criteria

These criteria are a compilation of recommendations from multiple authors^{2, 3, 4, 5, 6}

Jessy is an adult natal male who is 24yrs old from Iowa. He is unemployed at this time however reports that he does have income working independently as a prostitute in drag within his small town. Jessy does identify as a male and wishes to transition to a female due to the potential for increased amounts of money he can earn as a real female. His past history includes being in the Marines for 3 years after high school. For the last 3 years he has supported himself by prostitution. His family resides in Minnesota; however, he is not in contact with his family as Jessy does not want them to worry about

him. His family consists of his mother, age 67 with a history of obesity, diabetes, hyperlipidemia, cardiovascular atherosclerosis and previous tobacco use. His father is 65yrs old with a current and past medical history of schizophrenia and tobacco use. Jessy has no siblings. He denies ever having true feelings of being born in the wrong body. Jessy has initiated care to request treatment with hormones to transition into female. He is dressed in female attire and reports wearing feminine clothing most often. He admits to having a long history of depression and previous suicide attempts. Jessy has previously been diagnosed with schizophrenia and notes that he “does not need to take medication any longer”. Admits to hearing voices but he is able to calm the voices down with drinking alcohol. He smokes 1 pack per day and drinks a pint of whiskey each day.

Physical Examination

VITAL SIGNS: within normal limits (WNL).

GENERAL: The patient is alert, oriented, and pleasant, in no acute physical distress. Does not seem anxious or depressed. Affect slow; however, cooperative with exam.

HEENT: WNL.

NECK: WNL

CHEST: WNL

CARDIOVASCULAR: WNL

ABDOMEN: WNL.

GENITOURINARY: Normal circumcised penis with condyloma lesions. His testes are descended bilaterally without masses.

RECTAL: Normal resting and voluntary sphincter tone. His prostate is flat, firm, non-nodular, and non-tender. Large clustered condyloma at anal enteritis.

NEUROLOGIC: No focal deficits; however, slow responses are noted. DTRs are intact.

MUSCULOSKELETAL: Normal bulk and tone; ambulates without difficulty.

INTEGUMENT: Warm and dry without rash or suspicious lesions.

Laboratory Work-up

Lipids, CBC, CMP, TSH and PSA were ordered and results were within normal guidelines.

Diagnoses

Substance abuse: daily alcohol and tobacco use.

Schizophrenia and Depression

High risk sexual behavior

Genital and anal chondyloma

Differential Diagnoses DSM4 criteria for GID:

See above

Based on the DSM4 criteria for hormone therapy are as follows:

1. Persistent, well-documented gender dysphoria; 0
2. Capacity to make a fully informed decision and to consent for treatment; 0

3. An adult of age 18, younger if emancipated; +
4. Medical or mental health concerns must be reasonably well controlled; as to not exacerbate existing co-morbidities, or induce additional health conditions. 0
5. Patient must be willing and agree to informed consent. +

+ Denotes meets criteria. 0 Denotes does not meet criteria

These criteria are a compilation of recommendations from multiple authors ^{2, 3, 4, 5, 6}

Treatment/Management

Jessy does not meet DSM4 Criteria for hormone therapy.
See tables 1A & 2A and tables 1B & 2B for further details.

Follow-up

See tables 1A, B & 2A, B.

Resources for Providers

1. The World Professional Association for Transgender Health (WPATH), Standards of Care ⁷ (SOC) originally established as the Harry Benjamin International Gender Dysphoria Association.
2. The National Endocrine Society 2009 Guidelines for Hormone Therapy for Transgenderism ²
3. Primary Care Protocol for Transgender Health. (2011), Center of Excellence for Transgender Health ⁸

Discussion

Question: Are both of these patients appropriate for beginning cross sex hormone treatment?

Answer: No, Jessy is not appropriate for receiving cross sex hormones as doing so can exacerbate several of his diagnosed health conditions. See guidelines mentioned above.

See tables 1A, B and 2A, B.

TABLE 1A: MASCULINIZING HORMONES

Effect Expected	Onset in months	Expected Maximum in years
Skin changes/acne	1-6	1-2
Hair growth body/ face	3-6	3-5

Male pattern baldness		
Muscle mass increases	6-12	2-5
Redistribution of body fat	3-6	2-5
Cessation of menses	2-6	n/a
Clitoral enlargement Vaginal atrophy	3-6	1-2
Voice deepens	3-6	1-2
Libido increases	2-6	Variable

Tables 1A&B - Information obtained from multiple sources ^{2, 4, 5, 9}

TABLE 1B: FEMINIZING HORMONES

Effect Expected	Onset in months	Expected Maximum in years
Skin softening	3-6	1-2
Loss of muscle mass	3-6	1-5
Body fat redistribution	3-6	variable
Libido and spontaneous erections decrease	1-3	1-2
Male pattern baldness halts	1-3	1-2
Breast growth	3-6	2-3
Decreased testicular volume & sperm production decreases	3-6	2-3

Table 2A

Monitoring of MTF patients on hormones	Time measurement to monitor
*Evaluate and monitor for appropriate signs of feminization and for development of adverse reactions.	Every 2–3 months in the first year and then 1–2 times per year.

<p>*Measure serum testosterone and estradiol</p> <p>Serum testosterone levels should be <55 ng/dl.</p> <p>*Serum estradiol should not exceed the peak physiologic range for young healthy females, with ideal levels, 200 pg/ml.</p> <p>*Estrogen dosages should be adjusted according to the serum levels of estradiol.</p> <p>*For individuals on spironolactone, serum electrolytes particularly potassium should be monitored.</p>	<p>Every 3 months.</p> <p>Every 3 months</p> <p>Doses may fluctuate slightly.</p> <p>Every 3 months initially in the first year.</p>
<p>*Routine cancer screening recommended in non-transsexual individuals (breasts, colon, prostate).</p>	<p>Per normal recommended adult screenings.</p>
<p>*Consider BMD testing at baseline if risk factors for osteoporotic fracture are present.</p> <p>In individuals at low risk.</p> <p>*Screening for osteoporosis should be conducted at age 60.</p>	<p>Risk Factors: previous fracture, family history, glucocorticoid use or prolonged hypogonadism.</p> <p>Sooner in those who are not compliant with hormone therapy.</p>

Tables 1A&B - Information obtained from multiple sources ^{2, 4, 5, 9}

Table 2B

Monitoring of FTM patients on hormones	Time measurement to monitor
*Evaluate and monitor patient for appropriate signs of virilization and for development of adverse reactions.	Every 2–3 months in the first year and then 1–2 times per year.
*Measure serum testosterone levels	Every 2–3 months until levels are in the normal physiologic male range:
<p>Patients using testosterone cypionate injections, the testosterone level should be measured mid-way between injections.</p> <p>With transdermal testosterone, the testosterone serum levels can be:</p> <p>During the first 3–9 months of testosterone treatment, total testosterone levels may be elevated; although free testosterone levels are normal due to high sex hormone binding globulin levels in some biological women.</p>	<p>If the level is >700 ng/dl or <350 ng/dl, adjust dose accordingly.</p> <p>At any time after 1 week.</p>
<p>Measure estradiol levels</p> <p>Estradiol levels should be <50 pg/ml</p>	<p>During the first 6 months of testosterone treatment or until there has been no uterine bleeding for 6 months.</p>
<p>Measure CBC and liver function tests at baseline and monitor weight, blood pressure, lipids, fasting blood sugar and hemoglobin A1c if diabetic.</p> <p>Monitor Lipid Levels as it is common for triglycerides to spike upon starting treatment and for the next 5 years.</p>	<p>Every 3 months for the first year and then 1–2 times a year.</p>
	<p>At age 60 or sooner if osteoporotic fracture risk is present. These include: previous fracture, family</p>

<p>Consider BMD testing at baseline if risk factors for osteoporotic fracture are present.</p>	<p>history or glucocorticoid use or in those who are not compliant with hormone therapy.</p>
<p>*If cervical tissue is present, pap smears are recommended.</p> <p>*If mastectomy is not performed, then consider mammograms.</p>	<p>Per screening recommendations by the American College of Obstetricians and Gynecologists.</p> <p>as recommended by the American Cancer Society</p>

2A&B Information obtained from multiple sources to compile these information tables Information obtained from multiple sources ^{2, 4, 5, 9}

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