ORIGINAL ARTICLE

Gynecological Providers' Willingness to Prescribe Gender-Affirming Hormone Therapy for Transgender Patients

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Abstract

Purpose: Transgender individuals face barriers to accessing gender-affirming hormone therapy, yet little is known about gynecological providers' willingness to provide such care.

Methods: We surveyed gynecological providers in one healthcare system to determine their willingness to prescribe hormone therapy (HT) for transgender patients and factors associated with willingness to both initiate and refill HT. **Results:** Among respondents (N = 60), 60.3% and 27.6% were willing to refill and initiate HT for transgender patients, respectively. Willingness to refill HT was associated with having met a transgender person and lower transphobia. Unwillingness was associated with lack of transgender health training, lack of staff knowledge about transgender health, and unfamiliarity with transition guidelines. Willingness to initiate HT was associated with younger age and resident status. Unwillingness was associated with unfamiliarity with transition guidelines. **Conclusion:** While gynecological providers are qualified to prescribe HT for transgender patients, willingness to do so may be influenced by both personal and educational/training factors. Encouraging and training gynecological providers to providers to increase access for transgender individuals.

Keywords: access to care; gender-affirming care; gender identity; hormone therapy; obstetrics-gynecology; transgender

Introduction

Transgender individuals, or those whose gender identity is different from their sex assigned at birth, often seek to better align their appearance with their gender identity by means of gender-affirming medical care such as hormone therapy (HT).^{1,2} HT offers significant benefits to transgender people, including improved overall mental health³ and better quality of life.⁴ However, transgender individuals often face barriers when seeking HT, including difficulty finding providers who are willing and competent in transgender care. Among respondents to the U.S. Transgender Survey, 78% wanted to use HT, yet only 49% reported current use.² Another barrier is that transgender individuals often delay care due to experiences of discrimination within the health care system.^{5,6} This delay may prolong the time it takes for transgender individuals to access HT or may interrupt access.

Gender-affirming HT has historically been prescribed by endocrinologists or other specialists but is increasingly being prescribed by primary care providers. Recently, calls have been made for gynecological providers to prescribe HT for transgender patients as well.¹ These providers are well versed in the prescription of HT for other purposes, such as menstrual cycle control and menopausal symptoms, making the extension of this type of care to transgender patients logical. While gynecological providers are conventionally seen as women's health providers, the American College of Obstetricians and Gynecologists has endorsed gynecologists' role in caring for transgender people and contributing to the

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reduction of health disparities for transgender people⁷ and providing voluntary training modules on transgender health care.⁸ Others have advocated for women's health care providers to expand their role beyond the limitations of gender as well.⁹ Gynecological providers are suited to assist not only with the gender identity goals of transfeminine patients but also with the ana-tomic needs of patients assigned female at birth.

Prior studies have examined gynecologists' comfort in caring for transgender individuals and found that between 29–59% of providers reported some level of comfort.^{10,11} Many gynecological providers report a lack of transgender health training and extremely low levels of transgender surgical training,¹¹ which may contribute to lower levels of comfort with this patient population. Yet, no prior studies have assessed the extent to which gynecological providers are willing to prescribe HT for transgender patients. Thus, evidence is lacking to inform efforts to address calls for expanded services. The aim of this study is to examine gynecological providers' willingness to refill and initiate HT, as well as to determine both clinical and nonclinical factors associated with their will-ingness to refill or initiate HT for transgender patients.

Methods

Sample and procedures

This study took place in a large integrated health system serving metropolitan Detroit, MI. The study was approved by Michigan State University's Institutional Review Board. The study assessed health care providers' willingness to provide gender-affirming health care through a survey. Eligible participants included family and internal medicine providers (residents, advanced practitioners, and attending physicians), as well as gynecological providers. For this analysis, we limited the sample to the 60 respondents who were gynecological providers (obstetrics and gynecology physicians, nurse midwives, and medical residents). Informed consent was obtained from participants at the beginning of the online survey. The survey data were collected and managed using REDCap (Research Electronic Data Capture).¹² In November 2015, all eligible participants were sent an email containing a unique link to a 15-min survey. Nonrespondents received two additional reminders. Respondents were mailed a \$30 gift card and were entered into a random draw for one of three \$100 gift cards.

Variables

Provider characteristics. The characteristics of respondents included age, gender, race/ethnicity, political views, religious identity, medical specialty, and provider type. Personal contact and clinical exposure. Informed by earlier research,¹³ personal contact and clinical exposure were measured using binary variables (yes/no), ever met a transgender person and cared for transgender patient in past 5 years, respectively.

Empathy. The question, "It is necessary for a healthcare practitioner to be able to comprehend someone else's experiences," was taken from a previously validated scale¹⁴ to characterize empathy toward transgender patients. The question used a 7-point Likert scale ranging from "strongly disagree" to "strongly agree" with higher scores indicating greater empathy.

Transphobia. Eight items, measured on a 7-point Likert Scale from "strongly disagree" to "strongly agree", were administered from a Transphobia Scale.¹⁵ One item from the original 9-item scale was excluded (I don't like it when someone is flirting with me, and I can't tell if they are a man or a woman.) We summed the item responses and calculated a mean of the summed items. Higher scores indicate a greater degree of transphobia. Exploratory factor analysis resulted in a single-factor scale, with good internal consistency (Cronbach's al-pha=0.81).*

***Correction added on** August 1, 2022, after first online publication August 16, 2021: *Table 1* showing the *Transphobia Scale Items* has been removed from the article and all subsequent tables renumbered.

Barriers and facilitators of transgender care. Participants were asked to indicate their level of agreement with the following statements assessing barriers to transgender care: "My lack of familiarity with guidelines for transition care for transgender patients discourages me from caring for transgender patients" (lack of familiarity with gender transition guidelines); "My lack of training in transgender-specific care discourages me from caring for transgender patients" (lack of training on transgender health); "My lack of exposure to transgender patients discourages me from accepting transgender patients" (lack of exposure to transgender patients); and "Lack of knowledge about transgender patients among my office staff, medical assistants, and/or nursing staff discourages me from caring for transgender patients" (lack of staff knowledge of transgender care). Assessing a facilitator to transgender care, participants were

asked to indicate their level of agreement with the statement, "I am capable of providing routine medical care to transgender patients" (feels capable of providing routine care). All questions were originally measured on a 7point Likert scale. Responses such as "strongly agree," "agree," and "somewhat agree" were coded as "yes," and all other responses were coded as "no."

Outcome variables. We examined two outcome variables related to willingness to provide care for transgender people. Willingness to refill HT was assessed using the statement, "I would continue a gender transition HT regimen initiated by another provider." Willingness to initiate HT was assessed using two statements, "I am willing to initiate HT for female-to-male patients," and "I am willing to initiate HT for male-to-female patients." These questions were adapted from a previous study¹⁰ and expanded to include willingness to prescribe HT. The "female-to-male" and "male-to-female" terminology was used for clarity. Respondents answered each question using a 7-point Likert scale. Responses were dichotomized using the procedures described above for barriers and facilitators. Participants who agreed with both statements were categorized as willing to initiate HT.

Statistical analysis

For all included variables, descriptive analyses were conducted. To assess the relationship between each independent variable and the outcome variables (willingness to refill HT, willingness to initiate HT), chi square tests, phi, and Cramer's *V* were conducted for categorical independent variables, and *t*-tests and Cohen's *D* were conducted for continuous independent variables.

Results

A total of 60 gynecological providers completed the survey (response rate = 74.0%). Findings for demographic characteristics are displayed in Table 1, and Table 2 presents findings exposure, barriers and facilitators, empathy, and transphobia variables. Most respondents were female (68.3%) and white (73.3%). Half were attending physicians (50.0%), 31.7% were advanced practitioners, and 18.3% were residents. Most respondents had met a transgender person before (79.7%). The majority of respondents reported lacking training in transgender health (71.9%), as well as familiarity with transgender health guidelines (74.1%). While 60.3% of providers were willing to continue HT for a transgender patient, only 27.6% were willing to initiate HT for transgender patients.

Factors associated with willingness to continue HT

Personal contact, select barriers and facilitators, and transphobia were associated with willingness to continue HT. Specifically, providers who had met a transgender person were more likely to be willing to continue HT (67.4%) compared to those who had not met a transgender person (33.3%) (phi=0.282, p=0.032) (Table 2). Providers who indicated that they did not have enough training on transgender health (87.5% vs. 48.8%, phi=-0.355, p=0.007) or were not familiar with transition care guidelines (86.7% vs. 51.2%, phi=-0.318, p=0.016) or who reported that their staff lacked knowledge about transgender people's care (76.5% vs. 42.9%, phi = -0.339, p=0.012) were less likely to be willing to continue HT for transgender patients. Participants who were willing to continue HT had significantly lower mean transphobia scores compared to those who were unwilling (mean = 2.6 vs. 3.2, Cohen's D = 0.626, p = 0.035). No sociodemographic variables were associated with willingness to continue HT.

Factors associated with willingness to initiate HT

Residents were more than thrice more likely to be willing to initiate HT compared to advanced practitioners and attending physicians (72.7% vs. 21.1% and 14.3%, Cramer's V=0.493, p=0.001) (Table 1). Participants who were willing to initiate HT were younger compared to those that were not willing to initiate HT (mean age=34.7 vs. 47.9, Cohen's D=-1.187, p<0.001). Providers who were willing to initiate HT were less likely to agree that they lacked familiarity with transition guidelines compared to those who were not willing to initiate HT (20.9% vs. 50.0%, phi=-0.278, p=0.036) (Table 2).

Discussion

We found that approximately 6 in 10 of the gynecological providers we surveyed were willing to refill HT prescriptions for transgender patients, but only three in ten were willing to initiate (or newly prescribe) HT. While it is encouraging that a sizable proportion of providers were willing to refill HT prescriptions, many transgender and nonbinary patients would like to use HT but are not able to access such care; thus, it is important to expand access to care providers. Furthermore, some patients may not have access to specialists such as endocrinologists to initiate HT; therefore, it is critical that primary care

Variables	n (%)	Willing to refill HT %	Effect size	χ^2/t	p	Willing to initiate HT %	Effect size	χ^{2}/t -4.24	<i>p</i> <0.001
Age (mean, SD)	44.4 (12.9)		0.095	-0.350	0.727				
Willing		43.9 (13.8)				34.7 (9.4)			
Not willing		45.2 (11.9)				47.9 (12.6)			
Gender			-0.105	0.646	0.422		0.102	0.604	0.437
Male	19 (31.7)	68.4				21.1			
Female	41 (68.3)	57.5				30.8			
Race/ethnicity			0.201	2.38	0.497		0.230	3.06	0.382
Black	5 (8.3)	40.0				20.0			
Asian or Pacific Islander	4 (6.7)	66.7				66.7			
White	44 (73.3)	65.9				27.9			
Other	7 (11.7)	42.9				14.3			
Religion			0.349	7.08	0.215		0.279	4.44	0.488
Atheist	3 (5.1)	66.7				66.7			
Christian	36 (61.0)	65.7				29.4			
Jewish	5 (8.5)	80.0				20.0			
Muslim	6 (10.2)	16.7				16.7			
Hindu	3 (5.1)	33.3				0.0			
Other	6 (10.2)	66.7				16.7			
Political views			0.091	0.493	0.782		0.293	4.97	0.083
Liberal	30 (50.0)	63.3				27.6			
Moderate	21 (35.0)	55.0				40.0			
Conservative	9 (15.0)	66.7				0.0			
Specialty			-0.028	0.046	0.831		-0.102	0.601	0.438
General	47 (78.3)	61.7				29.8			
Specialty	13 (21.7)	58.3				18.2			
Provider type			0.244	3.50	0.174		0.493	14.1	0.001
Resident	11 (18.3)	81.8				72.7			
Advanced practitioner	19 (31.7)	47.4				21.1			
Attending physician	30 (50.0)	62.1				14.3			

Table 1. Sociodemographic Characteristics of Respondents by Willingness to Refill and Initiate Gender-Affirming Hormone Therapy for Transgender Patients (N = 60)

HT, hormone therapy; SD, standard deviation.

providers, such as gynecological providers, are willing to not only refill but also to initiate HT for this patient population.

Participants who reported barriers related to lack of training, staff knowledge about transgender care, or familiarity with transition care guidelines were less willing to refill HT prescriptions compared to providers who did not report such barriers. Factors unrelated to clinical training or experience were also associated with providers' willingness to refill HT prescriptions. Specifically, those who reported ever having met a transgender person were more likely to be willing to continue HT. Transphobia also was significantly associated with willingness; while the mean transphobia score difference was small, participants with higher transphobia scores were significantly less likely to be willing to continue HT. Previous research suggests that holding transphobic views is inversely related to knowledge about transgender health¹⁶; thus, addressing transphobia is likely an important part of education for culturally sensitive transgender care. Social contact may help with this as research has found

that transphobia was reduced when college students had exposure to transgender people.¹⁷ Thus, educational programs that address personal bias and facilitate social contact may be an effective way to increase care quality for transgender patients.

With respect to factors associated with willingness to initiate HT, in terms of barriers, only a lack of familiarity with transition care guidelines was associated with willingness to initiate HT. In addition, younger providers were more willing to initiate HT, and residents were thrice more likely to be willing to initiate HT compared to attending physicians or advanced practitioners. While residents, as trainees, are generally likely to be younger than attending physicians or other providers, they are also regularly working outside their comfort zones and routinely learning new skills and, thus, may be more open to initiating this type of care. In addition, it is possible that other variables that were approaching significance, such as lack of training (p=0.070) and political views (p=0.083), may have been significant in a larger sample. Further studies are needed to explore the role of these other variables.

Variables	n (%)	Willing to refill HT %	Effect size	χ^2/t	p	Willing to initiate HT %	Effect size	χ^2/t	p
Ever met a transgender person			0.282	4.61	0.032		0.131	0.979	0.322
Yes	47 (79.7)	67.4				31.1			
No	12 (20.3)	33.3				16.7			
Transgender patient in past 5 years			0.180	1.88	0.170		0.158	1.42	0.232
Yes	24 (40.7)	70.8				34.8			
No	35 (59.3)	52.9				20.6			
Lack of training on transgender health			-0.355	7.17	0.007		1.242	3.28	0.070
Yes	41 (71.9)	48.8				22.0			
No	16 (28.1)	87.5				46.7			
Lack of exposure to transgender patients			-0.148	1.28	0.258		-0.159	1.43	0.231
Yes	25 (43.1)	52.0				20.0			
No	33 (56.9)	66.7				34.4			
Lack of staff knowledge about transgender care			-0.339	6.34	0.012		-0.102	0.558	0.455
Yes	21 (38.2)	42.9				23.8			
No	34 (61.8)	76.5				33.3			
Lack of familiarity with guidelines			-0.318	5.86	0.016		-0.278	4.42	0.036
Yes	43 (74.1)	51.2				20.9			
No	15 (25.9)	86.7				50.0			
Capable of providing routine care			0.106	0.668	0.414		-0.091	0.480	0.489
Yes	28 (46.7)	66.7				23.1			
No	32 (53.3)	56.3				31.3			
Empathy (mean, SD)	5.8 (0.77)		0.200	0.750	0.457		0.342	1.16	0.253
Willing	,	5.9 (0.69)				6.0 (0.71)			
Not willing		5.7 (0.89)				5.8 (0.80)			
Transphobia (mean, SD)	2.88 (0.97)		0.626	-2.17	0.035		0.451	-1.56	0.125
Willing		2.7 (0.99)				2.5 (1.13)			
Not willing		3.2 (0.86)				3.0 (0.90)			
Total		60.3				27.6			

Table 2. Exposure, Barriers and Facilitators, Empathy, and Transphobia by Willingness to Refill and Initiate Gender-Affirming Hormone Therapy for Transgender Patients (N = 60)

Because lack of familiarity with guidelines was associated with unwillingness to both initiate and refill HT, connecting gynecological providers with guidelines for transition care and hormone treatment dosing, such as the UCSF Guidelines for the Primary Care of Transgender and Gender Nonbinary People,¹⁸ is essential, as is increasing training generally and provision of tools for training nursing and other staff.¹⁹ One study found that after gender identity issues were added to the curriculum, medical students' discomfort in working with transgender patient decreased.²⁰ The addition of transgender content to medical education may be one intervention that increases medical students', residents', and attending physicians' willingness to treat transgender patients in the future, but further studies are needed to understand what type of content affects willingness to provide care versus attitudes, knowledge, and other aspects of competency in this area.

Limitations

Our study has limitations. Our sample size was small; thus, we were able to conduct bivariate analysis only. Another limitation is that the study's sample comes from a single health system in metropolitan Detroit, thereby limiting generalizability. In addition, data were collected five years ago, and providers' willingness, knowledge, and attitudes may have evolved given growing attention to transgender health needs; however, studies regarding providers' willingness to prescribe HT for this patient population are still uncommon. Finally, the survey asked about transgender patients, rather than gender diverse or nonbinary patients, who also may face many similar (as well as unique) barriers to accessing HT.

Conclusion

Gynecological providers' willingness to continue or initiate HT for transgender individuals is not only influenced by clinical barriers such as lack of familiarity with transition guidelines but also by factors that go beyond medical training. Increasing the number of health care providers who are able and willing to administer HT for transgender people is vital to increase access to this critical gender-affirming medical service. Training and continuing education for health professionals should include not only clinical information and medical guidelines related to caring for transgender patients and prescribing HT for this patient population but also address biases, promote cultural sensitivity and humility, and give providers tools to interact with transgender patients in a respectful and competent manner. Given that gynecological providers are already trained to understand the mechanisms and physiology of HT, enhancing their training to include HT among transgender individuals will make it more accessible to those in need. Future research should explore gynecological providers' willingness to continue or initiate HT for transgender individuals in other health systems across different regions and locations, and qualitative methods should be used to understand the nuances between transphobia, lack of knowledge, and lack of training among providers.

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REDCap is a secure web-based application designed to support data capture for research studies, providing (1) an intuitive interface for validated data entry; (2) audit trails for tracking data manipulation and export procedures; (3) automated export procedures for seamless data downloads to common statistical packages; and (4) procedures for importing data from external sources.

Authors' Contributions

Study design: D.A.S., M.R.W., K.D.J., D.S.; Data collection: D.A.S., D.S.; Data analysis and intrepretation: D.A.S., L.R.P., D.S.; and Article preparation: D.A.S., L.R.P., M.R.W., K.D.J., D.S.

Author Disclosure Statement

No competing financial interests exist.

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Abbreviations Used

HT = hormone therapy REDCap = Research Electronic Data Capture SD = standard deviation