To Refer or Not to Refer: General Pediatricians’ Perspectives on Their Role in Caring for Transgender Youth

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Abstract
Little is known about general pediatricians’ experience and knowledge regarding the care of transgender youth. We surveyed \( N=50 \) general pediatricians practicing in an integrated Midwest health system. Few respondents had participated in medical management care for transgender patients, but one-third were willing to do so if training opportunities were made available. Notably, <60% of respondents were comfortable providing routine care for transgender youth. At a minimum, pediatricians need the training to feel capable of providing routine care for transgender pediatric patients. In addition, opportunities for training should be offered to those who are willing to learn about medical management of transgender youth.

Keywords: transgender youth; GnRH analogues; hormone therapy; pediatrics

Introduction
The onset of puberty can lead to worsening gender dysphoria for transgender youth and may serve to exacerbate the health disparities that exist between transgender youth and their cisgender peers, including increased rates of depression, self-harm, and suicidality.1–3 Currently, there are two approaches to biomedical intervention during the peripubertal period to support transgender youth in affirming their gender identity. For younger patients who are in the early stages of puberty, the prescription of gonadotropin-releasing hormone (GnRH) analogues is recommended to block puberty and the accompanying development of secondary sex characteristics.3–5 At least one study has shown that treatment with puberty blockers can increase general functioning and decrease depressive symptoms and behavioral problems for transgender youth.6 For patients in the later stages of puberty, guidelines recommend the use of cross-sex hormone therapy (HT), with or without the continuation of GnRH analogues. The age at which to initiate cross-sex hormones is an evolving area of debate. Although early guidelines recommended waiting until age 16, more recent recommendations have allowed for earlier initiation of cross-gender hormones on a case-by-case basis.5,7

Transgender youth often first identify themselves to a general pediatrician. As the first medical provider that transgender youth and their families usually encounter, it is critical for pediatricians to understand available options for gender-affirming care and either provide those services themselves7 or coordinate appropriate referrals and follow-up. Despite increased visibility of transgender youth, gaps in the availability of sensitive and appropriate medical care for this population persist8,9 and guidelines remain vague about which types of clinicians should diagnose, manage, and prescribe puberty blockers and HT for transgender youth. The role of the primary care provider in the provision of gender-affirming medications is rapidly evolving. However, some general pediatricians may view these specific services as being outside of their scope of practice. Currently, data are lacking regarding

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general pediatricians’ experiences, knowledge level, and comfort with either managing or referring transgender pediatric patients for endocrine care. Therefore, the aim of this study was to explore general pediatricians’ experience with and willingness to manage gender-affirming medical care (both puberty blockers and cross-sex hormones) for transgender youth. Specifically, we describe pediatricians’ experiences, willingness to provide care, barriers and facilitators to providing such care, and knowledge and opinions related to the care of pediatric transgender patients.

Materials and Methods

Setting and sample
In April 2017, we conducted a pilot survey of all general pediatricians (N = 50) practicing in the ambulatory sites of an integrated health system serving a Midwest city and its surrounding suburbs. The nearest comprehensive gender services program is located ~45 miles away from the health system’s main campus. Eligible pediatricians were e-mailed a link to a 15-min online survey housed in RedCAP.10 The survey questions assessed pediatricians’ experiences, willingness, barriers, facilitators, and knowledge related to the care of transgender pediatric patients. Respondents were mailed a $10 gift card. The study was approved by the Institutional Review Boards at the participating organizations.

Measures and analysis
Survey questions had either categorical or binary response values. Sociodemographic questions and knowledge/opinion questions were categorical and raw frequencies are reported. Questions related to clinical experiences (ever initiated GnRH analogues, etc.) were all binary (yes/no) questions and reported as such. All willingness, confidence, facilitators, and barrier-related questions had Likert scale value options (agree, neutral, or disagree). For these variables, we report the proportion of respondents that they “agree.” Descriptive statistics were conducted (means/standard deviations and frequencies) to summarize study data.

Results

Sociodemographics
Respondents (N = 21, 42% response rate) were 81% female and most (67%) had been in practice for 20 years or more. Half of respondents were white, about one-third were Asian, and 14% were African American. Most identified their religion as Christian (66.7%) and indicated that they were moderately religious (57.1%) (data not shown). Just about half (52%) of respondents had provided care for a pediatric patient with gender dysphoria in the past.

GnRH analogues
None of the respondents had newly prescribed puberty blockers and only one respondent had refilled a prescription for puberty blockers, only 15% were willing to refill GnRH analogue prescriptions, and 30% were willing to learn how to manage GnRH analogues for transgender pediatric patients if given the opportunity (Table 1).

Cross-sex HT
None of the respondents had ever initiated cross-sex HT and one respondent had refilled HT for a pediatric transgender patient (Table 1). A total of 19.0% of respondents were willing to refill HT and 30% were willing to learn how to prescribe HT for transgender pediatric patients if given the opportunity.

Referrals for endocrine management
More than half of respondents (55.0%) indicated that they would always refer to another provider for GnRH analogues, and a similar proportion (52.4%) indicated that they would always refer a patient for cross-sex HT (Table 1). More than one-third of respondents

| Table 1. General Pediatricians’ Experiences and Willingness to Provide Endocrine Management to Transgender Youth (N = 21) |
|-----------------------------------------------|---------------|
| Variable                                      | %             |
| Ever cared for transgender pediatric patient | 52.4          |
| Ever counseled a patient/family about gender identity issues | 72.7          |
| GnRH analogues for transgender youth          |               |
| Ever initiated                                 | 0.0           |
| Ever continued/refilled                        | 4.8           |
| Willing to initiate                            | 0.0           |
| Willing to continue/refill                     | 15.0          |
| Willing to learn how to provide if given opportunity | 30.0          |
| HT for transgender youth                       |               |
| Ever initiated                                 | 0.0           |
| Ever continued/refilled                        | 4.8           |
| Willing to initiate                            | 4.8           |
| Willing to continue/refill                     | 19.0          |
| Willing to learn how to provide if given opportunity | 30.0          |
| Referrals                                      |               |
| Ever referred to mental health provider for gender dysphoria diagnosis letter | 45.5          |
| Ever referred to another provider for GnRH analogue or HT | 36.4          |
| Would always refer for GnRH analogue            | 55.0          |
| Would always refer for HT                       | 52.4          |

GnRH, gonadotropin-releasing hormone; HT, hormone therapy.
had referred a patient to another provider for hormone therapy for gender affirmation in the past (36.4%).

Referrals for gender dysphoria confirmation by a mental health provider
Close to half had referred a transgender pediatric patient to a mental health provider for confirmation of gender dysphoria (45.5%).

Factors that facilitate caring for transgender youth
Although more than half of respondents agreed that they felt capable of providing routine care to transgender youth (57.1%), fewer respondents were familiar with regimens for GnRH analogues (33.3%) or HT (23.8%) or confident that they understood the benefits and risks of these medical management options for transgender pediatric patients (14.3%) (Table 2).

Barriers to caring for transgender pediatric patients
Reported barriers to caring for transgender youth included a lack of time during office visits (61.9%), lack of familiarity with any guidelines for gender-affirming care (57.1%), lack of training (61.9%), not knowing mental health providers who could confirm a gender dysphoria diagnosis (35.0%), lack of exposure to transgender patients (23.8%), and lack of knowledge about transgender patients among medical staff (23.8%) (Table 2).

Knowledge and opinions related to caring for transgender pediatric patients
In terms of knowledge, half or more respondents indicated that they did not know when puberty blockers should be initiated (76.2%), when cross-sex HT should be initiated (80.0%), who can prescribe puberty blockers and HT to transgender pediatric patients (60.0%), whether gender dysphoria is classified as a mental disorder (71.4%), or whether children with gender-variant identities that persist into adolescence develop an adult transgender identity (50.0%) (Table 3).

Participants were more knowledgeable about psychosocial issues affecting transgender youth; nearly all of the respondents understood that puberty is a significant source of distress for transgender youth (95.2%). Most also indicated that the statement “Initiating social and medical gender transition for pediatric transgender patients has no impact on their risk of depression” was false (85.7%), and most respondents knew that clinicians were not obligated to disclose a pediatric patient’s gender identity to the parent or guardian if the child did not want the parent to know (61.9%) (Table 3).

Discussion
This is the first study of which the authors are aware to assess general pediatricians’ experiences and opinions about caring for transgender youth, particularly related to pediatricians’ views on their role in medication management for this patient population. We found that very few respondents had initiated or continued GnRH analogues or HT for a pediatric transgender patient in the past. About half of respondents indicated that they would always refer transgender youth for medical management services. Yet, more than half of respondents indicated that they did not know what type of healthcare provider (primary care, psychiatrist, endocrinologist, etc.) should be providing medical management for transgender youth. Because general pediatricians are often the gatekeepers to specialty care, it is critical that they be knowledgeable about when and where to refer transgender youth for medical management services, if the patient requests them.

Only about one-third of participants indicated that they were willing to learn how to prescribe GnRH analogues or HT if given the opportunity. This divide may be indicative of current ambiguity regarding the type of care general pediatricians can and should be providing for transgender youth and how far this care extends into gender-affirming treatments. There is more to be explored regarding the reasons why the majority of pediatricians were unwilling to learn how to prescribe HT and GnRH analogues. At a minimum, our findings illustrate the need for increased training.

Table 2. General Pediatricians’ Facilitators and Barriers Related to Caring for Transgender Youth (N = 21)

| Variable                                                                 | %   |
|--------------------------------------------------------------------------|-----|
| Feels capable of providing routine medical care to pediatric transgender patients. | 57.1 |
| Familiar with Lupron/GnRH analogue regimens                              | 33.3 |
| Familiar with gender-affirming HT regimen                                | 23.8 |
| Confident in knowledge of the health risks/benefits of GnRH and gender-affirming HT | 14.3 |
| Not enough time during office visits to provide gender transition care   | 61.9 |
| Not familiar with transition care guidelines                             | 57.1 |
| Lack of training in transgender-specific pediatric care                  | 61.9 |
| Do not know mental health providers who will assess/confirm gender dysphoria | 35.0 |
| Lack of exposure to transgender patients                                 | 23.8 |
| Lack of knowledge about transgender patients among office staff, medical assistants, and/or nursing staff | 23.8 |
| Fear of being sued after irreversible treatments                         | 4.8 |
opportunities both during medical training and after providers are in primary care practice—this is true for both the minority of pediatricians who expressed willingness to learn and those who may have reservations about providing such care.

Regardless, it is imperative that general pediatricians are willing and confident in their ability to provide routine care—that is, general prevention, counseling, or acute care services that would be provided to any pediatric patient—to transgender youth. We found that <60% of respondents felt capable of providing routine care to this patient population, with providers citing barriers to caring for transgender youth such as lack of time, lack of training, and lack of familiarity with guidelines. Although respondents demonstrated an understanding of some of the psychosocial risk factors for transgender youth and the importance of gender-affirming medical care, it is clear that more training and resources are needed for general pediatricians.

Limitations
This was a pilot study in one health system among a group of mostly Christian, moderately religious providers with a small sample size and suboptimal response rate, making generalizability difficult. Lack of power to conduct multivariate analysis is also a limitation, as we were unable to explore which provider characteristics, beliefs, or experiences were associated with willingness to deliver medical transition care to transgender youth, such as years of practice experience.

Table 3. General Pediatricians’ Knowledge About Caring for Transgender Youth (N = 21)

| Question                                                                 | %   |
|-------------------------------------------------------------------------|-----|
| 1. At what stage should the use of puberty blockers (GnRH) begin in a pediatric patient with persistent gender dysphoria? (check all that apply) |     |
| When the patient, parent, and clinician agree                           | 19.0|
| Tanner stage 1                                                          | 4.8 |
| Tanner stage 2                                                          | 9.5 |
| Tanner stage 3+                                                         | 4.8 |
| Puberty blockers should never be prescribed to pediatric transgender patients | 4.8 |
| I do not know                                                           | 76.2|
| 2. At what point can the use of cross-sex HT generally begin for a pediatric patient with persistent gender dysphoria? (check all that apply) |     |
| When the patient, parent, and clinician agree                           | 10.0|
| When the patient has used puberty blockers for at least 2 years         | 5.0 |
| Age 16 if the patient has used puberty blockers for at least 2 years    | 10.0|
| Cross-sex HT should never be prescribed to transgender youth            | 5.0 |
| I do not know                                                           | 80.0|
| 3. Lupron/GnRH analogue and cross-sex HT can be prescribed to pediatric transgender patients by (check all that apply) |     |
| Primary care providers (pediatricians, IM, FM)                          | 25.0|
| Psychiatrists                                                           | 15.0|
| Endocrinologists                                                        | 40.0|
| Adolescent medicine providers                                           | 30.0|
| I do not know                                                           | 60.0|
| 4. Most children whose gender-variant identity persists into adolescence develop an adult transgender identity |     |
| True                                                                    | 40.0|
| False                                                                   | 10.0|
| I do not know                                                           | 50.0|
| 5. Puberty is often a source of significant distress for transgender youth |     |
| True                                                                    | 95.2|
| False                                                                   | 0.0 |
| I do not know                                                           | 4.8 |
| 6. Gender dysphoria in youth is classified as a mental disorder         |     |
| True                                                                    | 4.8 |
| False                                                                   | 23.8|
| I do not know                                                           | 71.4|
| 7. Initiating social and medical gender transition for pediatric transgender patients has no impact on their risk of depression |     |
| True                                                                    | 9.5 |
| False                                                                   | 85.7|
| I do not know                                                           | 4.8 |
| 8. It is the clinician’s obligation to disclose a pediatric patient’s gender identity to the patient’s parent/guardian even if the child does not wish for the parents to know |     |
| True                                                                    | 14.3|
| False                                                                   | 61.9|
| I do not know                                                           | 23.8|

FM, family medicine; IM, internal medicine.
Conclusions
This is the first study of which the authors are aware to explore general pediatricians’ familiarity and comfort with this clinical area. Given the necessity of access to sensitive and appropriate pediatric care for transgender youth, general pediatricians will likely play an increasingly central role in the medical transition process for these patients. However, general pediatricians’ knowledge on this topic is limited and opportunities for training should be offered to those who are interested and willing to learn about medical management for this vulnerable population. Because encouraging general pediatricians to take on medical management for transgender youth could serve to greatly expand access to such care, more explicit statements on the role of the general pediatrician in gender-affirming medical care from professional and guideline-setting organizations are needed. At a minimum, pediatricians need the exposure and training to feel capable of providing routine care for transgender pediatric patients, providing support for transgender patients and their families, and referring or coordinating medical management care for this population.

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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.

Author Disclosure Statement
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Abbreviations Used
GnRH = gonadotropin-releasing hormone
HT = hormone therapy

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