



Perioperative misgendering experiences in patients undergoing gender-affirming surgery: a call for a gender-inclusive healthcare environment

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Abstract

Background Transgender individuals have long experienced discrimination and exclusion from medicine. Misgendering occurs when an individual is referred to using a gender or address incongruent with their identity. We evaluated the incidence of misgendering throughout the perioperative experience for patients undergoing gender-affirming surgery (GAS).

Methods Patients diagnosed with gender dysphoria who previously received GAS by the senior author were contacted to complete an IRB-approved survey to evaluate instances of misgendering while in the hospital for GAS. Study results were summarized using descriptive statistics.

Results Of 471 patients contacted, 182 completed the survey (38.6%). The most cited gender identity was transfemale (28.0%). Most patients reported respect for their gender identity (60.4%) and name (76.8%) during their perioperative experience. Twenty-two percent cited triggering experiences, and 15.4% reported interactions with healthcare employees causing them to reach out to a support system. Misgendering most commonly included incorrect use of patients' preferred names and/or pronouns ($n = 50$, 86.2%), most commonly at surgical check-in ($n = 10$, 45.5%). Recommendations to improve feelings of gender congruence during patients' stay included updated names and gender identities in electronic medical records (80.8%), and names and pronouns listed on curtains and doors (52.3%) and name tags (51.5%).

Conclusions Until now, the exact incidence of misgendering among patients seeking GAS have not been well established. Despite high levels of satisfaction, a large proportion still reported serious instances of misgendering. Improvements must be made to the perioperative experience to reduce misgendering and provide support and comfort during the sensitive period surrounding patients' gender transition.

Level of evidence: Not gradable

Keywords Gender-affirming surgery · Transgender · Gender diverse · Non-binary · Misgender · Quality improvement

Introduction

Care for transgender and gender diverse individuals (TGDI) has taken great strides in recent decades. However, patients with gender dysphoria continue to comprise a vulnerable population, facing challenges in care due to higher rates of psychiatric comorbidities [1–4], substance use [5], and poor access to support systems [3, 6]. Even with optimal social and mental health care, patients often suffer from an ingrained, long-standing societal culture of discrimination from the medical system [7, 8]. The 2015 U.S. Transgender Survey found that 23% (roughly 6400) of respondents did not see a doctor in the past year for fear of being mistreated because of their gender dysphoria [9].

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Multiple studies have demonstrated gender-affirming medical and surgical interventions as helping patients achieve gender congruity [10–12]. However, if patients experience discrimination in the healthcare system, it may impair patient-physician interactions, not only leading to poorer outcomes [13], but also to patients forgoing treatment for their gender dysphoria [14, 15]. Misgendering is defined as referring to an individual using a gender or form of address incongruent with their identity [16]. Misgendering experiences impact both the physical and mental health of TGDI, and the continued prevalence reflects ongoing stigmatization and the need for policies to protect against further marginalization of this community [17].

Fortunately, alongside advances in the specialization of medical and surgical options for gender-affirming care, well-integrated multidisciplinary care centers to treat gender dysphoria have increased nationally [18–20]. Despite the recent increased prevalence of gender-affirmation clinics and reduction of medical barriers, inclusion of appropriate and sensitive language and terms is commonly lacking in all levels of medical education, with most hospital and electronic medical record (EMR) systems yet to adopt policies and programming to respect assigned sex at birth and identified genders [8, 21]. Previous studies have found that instances of misgendering correlate with overall poorer healthcare experiences [22]. Until now, however, reports of the exact incidence of misgendering among patients seeking gender-affirming surgery (GAS) have not been established.

This study aims to evaluate the incidence and types of misgendering that occurred at any time during the perioperative experience for patients seeking gender-affirming care, in the hope of identifying areas for quality improvement (QI), continued education, and overall enhancement in the care provided to transgender and gender diverse patients.

Methods

Institutional review board approval (STUDY00004465) was obtained for a survey designed to determine instances of misgendering that patients experienced during their time at the hospital for GAS. Patients diagnosed with gender dysphoria were identified using the International Classification of Disease (ICD)-10 code F64.0, of which 496 were identified as having undergone prior GAS by the senior author based on chart review. A total of 471 patient emails were collected through the EMR. The 23-item survey consisted of questions regarding patient demographics, perioperative experiences with misgendering, and QI suggestions for the operative experience. The full survey text is available (Supplemental Digital Content 1). The web-based survey was hosted by Qualtrics survey software (Qualtrics, Seattle, WA), with participants emailed survey links. The email

invitation can be accessed in full (Supplemental Digital Content 2). The survey period began on January 3, 2022, and ended on January 24, 2022.

Additional patient demographic information, such as race, age, and GAS procedures, were collected through retrospective chart review. GAS were categorized into three types of major procedures: genital or reproductive (e.g., vaginoplasty, phalloplasty), chest (e.g., mastectomy, breast augmentation), or head or neck procedures (e.g., forehead feminization, thyroid chondroplasty).

Descriptive statistics were used to characterize study subjects. Continuous variables were described by mean and standard deviation (SD) or median and interquartile range (IQR) as determined by the Shapiro–Wilk test of normality. Categorical variables were described by frequencies and percentages. Statistical analysis was performed using STATA v.17 [23].

Results

From 471 emails distributed, 182 patients responded (38.6%). Of these responses, 167 were complete (91.8%). Mean patient age at time of GAS was 33.8 ± 12.1 years. Most patients were White or Caucasian ($n = 122$, 67.8%). Commonly cited gender identities included transfemale ($n = 51$, 28.0%), female ($n = 37$, 20.3%), transmale ($n = 35$, 19.2%), and non-binary ($n = 28$, 15.4%). Less commonly reported were genderqueer, gender-fluid, gender non-conforming, gender-expansive, and agender. The majority of patients reported undergoing a legal name change prior to their GAS ($n = 121$, 66.5%). GAS procedures performed included genital or reproductive procedures ($n = 84$, 46.7%), chest procedures ($n = 86$, 47.8%), or head or neck procedures ($n = 13$, 7.2%; Table 1).

Regarding the perioperative experience, 60.4% of patients stated always feeling respect for their gender identity, while 39.6% reported at least one instance where it was not respected; 76.8% of patients stated always being called by their preferred name, while 23.2% reported at least one instance where they were not. 20.5% of patients reported at least one instance of being discriminated against or feeling mistreated because of their gender identity; 5.4% felt discrimination more than half or all of the time; 22% reported a triggering experience with a healthcare employee; and 15.4% had a negative interaction with a healthcare employee that made them reach out to a friend, family member, therapist, or other support person.

In misgendering instances, patients most commonly felt disrespect for their gender identity when others did not correctly use their preferred name and/or pronouns ($n = 50$, 86.2%). Other misgendering experiences included situations where providers not directly involved in the patient's care

Table 1 Respondent demographics

Characteristic	No. (%)
Total responses	182/471 (38.6)
Complete	167/182 (91.8)
Partial	15/182 (8.2)
Mean age \pm SD, years	33.8 \pm 12.1
Race ($n = 180$)	
Caucasian	122 (67.8)
African American	32 (17.8)
Asian or Pacific Islander	4 (2.2)
Hispanic or Latino	0 (0.0)
Other	12 (6.7)
Unknown	10 (5.6)
Gender identity ($n = 182$)	
Male	18 (9.8)
Female	37 (20.3)
Transmale	35 (19.2)
Transfemale	51 (28.0)
Non-binary	28 (15.4)
Genderqueer	2 (1.1)
Gender-fluid	1 (0.5)
Gender non-conforming	2 (1.1)
Gender-expansive	0 (0.0)
Agender	1 (0.5)
Prefer not to say	0 (0.0)
Other	7 (3.8)
Preferred pronouns ($n = 182$)	
He/Him/His	55 (30.2)
She/Her/Hers	90 (49.5)
They/Them/Their	25 (13.7)
Ze/Hir/Hirs	0 (0.0)
Ze/Zem/Zirs	0 (0.0)
It/Its	0 (0.0)
Prefer Not to Say	0 (0.0)
Other	11 (6.0)
Legal name change prior to gender-affirming surgery ($n = 182$)	
Yes	121 (66.5)
No	61 (33.5)
Gender-affirming surgery ($n = 180$)	
Genital or reproductive ^a	84 (46.7)
Chest ^b	86 (47.8)
Head or neck ^c	13 (7.2)

^aFor example, penile inversion vaginoplasty, phalloplasty, labioplasty, hysterectomy, orchiectomy

^bFor example, mastectomy, breast augmentation

^cFor example, thyroid chondroplasty, forehead feminization, genioplasty, rhinoplasty

interviewed or examined them ($n = 9$, 15.5%), individuals stared ($n = 6$, 10.3%), genitalia was exposed ($n = 3$, 5.2%), or the chest was exposed ($n = 1$, 1.7%). Regarding incorrect

questioning about genetic sex-related conditions, questions most involved incorrect inquiry about the possibility of pregnancy ($n = 10$, 31.3%) and last menstrual period ($n = 6$, 18.8%). When rating their comfort with the clinical team regarding their gender identity (0 = uncomfortable, 10 = very comfortable), the mean response was 9.1 ± 1.4 (Table 2).

Surgical check-in served as the most reported location of mistreatment related to gender identity ($n = 10$, 45.5%), followed by the pre-operative area ($n = 9$, 40.9%) and post-operatively in the patient's hospital room ($n = 8$, 36.4%). In surgical check-in or pre-operative phase, nursing aids and technicians ($n = 12$, 60.0%), registration staff ($n = 9$, 45.0%), and nurses ($n = 8$, 40.0%) were commonly cited to be involved with patients' misgendering experiences. Within the operating room, nurses and technicians were involved in misgendering experiences ($n = 4$, 100.0%). In the post-operative recovery phase (PACU), nursing aids and technicians ($n = 4$, 57.1%) and other patients' family and friends ($n = 4$, 57.1%) were commonly involved. In the remaining post-operative hospital admission, misgendering experiences frequently involved the patient's assigned nurse ($n = 4$, 40.0%), another nurse ($n = 5$, 50.0%), or nursing aids and technicians ($n = 3$, 30.0%; Table 3). Select free text describing misgendering instances are listed in Table 4.

When asked the importance of certain qualities of their perioperative care, correct acknowledgement of gender identity (9.4 ± 1.3) and preferred name (9.4 ± 1.4) were both rated incredibly important on a scale of 0 to 10. Patients were asked to rate their willingness to return to the same health system based on their inpatient experiences (0 = would never come back; 10 = would come back). If frequently misgendered and/or treated negatively due to their gender identity, patients reported unwillingness to return (3.4 ± 3.6), compared to a high likelihood of returning (9.5 ± 1.5) if always addressed by their preferred pronouns and names and if treated like cis-gendered patients (Table 5).

Most patients ($n = 130$, 71.4%) provided recommendations to improve feelings of gender congruence during the hospital stay. The majority cited changes to the EMR to include preferred names and gender identities ($n = 105$, 80.8%). Additional recommendations included preferred names and pronouns on signs on curtains and doors ($n = 68$, 52.3%) and on name tags ($n = 67$, 51.5%). Sixty-three (48.6%) cited that only allowing LGBTQ+ supporters to participate in their care would have improved feelings of gender congruence. Free-text responses yielded additional recommendations that could be used in QI initiatives (Table 6). The most common write-in recommendation was to increase training of hospital staff and care teams regarding gender identity and interactions with TGDI patients ($n = 12$, 70.6%). Three patients (17.6%) highlighted that use of the term "preferred" is offensive and should be removed when asking for patients' names and pronouns, given that their names and pronouns should not be

Table 2 Overall surgical experience in the hospital

Characteristic	No. (%)
Frequency experiencing respect for gender identity (<i>n</i> = 169)	
Never	3 (1.8)
Less than half the time	9 (5.3)
More than half the time	55 (32.5)
Always	102 (60.4)
Frequency being called by preferred name (<i>n</i> = 168)	
Never	1 (0.6)
Less than half the time	4 (2.4)
More than half the time	34 (20.2)
Always	129 (76.8)
Frequency feeling discriminated against or mistreated due to gender identity (<i>n</i> = 166)	
Never	132 (79.5)
Less than half the time	25 (15.1)
More than half the time	6 (3.6)
Always	3 (1.8)
Interaction with a healthcare employee that made patient reach out to therapist, family, or friend support system (<i>n</i> = 169)	
Yes	26 (15.4)
No	143 (84.6)
Experienced a situation that was triggering (<i>n</i> = 168)	
Yes	37 (22.0)
No	131 (78.0)
Occurrences that made the patient feel like their gender identity was not being respected (<i>n</i> = 58)	
Exposure of chest	1 (1.7)
Exposure of genitalia	3 (5.2)
Staring	6 (10.3)
Providers not directly involved in care interviewing or examining patient	9 (15.5)
Incorrect use of preferred name and/or preferred pronouns	50 (86.2)
Other	19 (32.8)
Incorrect questioning regarding genetic sex-related conditions (<i>n</i> = 32)	
Last menstrual period	6 (18.8)
Possibility of pregnancy	10 (31.3)
Breastfeeding	1 (3.1)
Penile discharge, pain, etc. (if not undergone phalloplasty)	0 (0.0)
Testicular pain, masses, etc. (if not undergone scrotoplasty)	0 (0.0)
Vaginal discharge, pain, bleeding, etc. (if not undergone vaginoplasty)	1 (3.1)
History of pregnancy/childbirths	4 (12.5)
History of prostate or testicular cancer	0 (0.0)
History of ovarian, uterine, or cervical cancer	1 (3.1)
Other	4 (12.5)
Comfort with clinical team regarding gender identity (<i>n</i> = 166; mean ± SD) ^a	9.1 ± 1.4

^aRated on a scale of 0–10; 0 = not comfortable at all; 10 = felt very comfortable and gender identity was respected

considered “preferred.” Two patients (11.8%) stated health system- and insurance-level changes in policy were necessary to enact change in their experiences. One patient (5.9%) recommended hiring TGDI consultants to help enact systemic changes beyond names and pronouns.

Discussion

Patients with gender dysphoria are always facing an uphill battle. Many have been struggling with their self-identity since adolescence or childhood and only recently have

Table 3 Locations and hospital staff involved in perioperative misgendering experiences

Characteristic	No. (%)
Location of mistreatment related to gender identity (n = 22)	
Surgical check-in	10 (45.5)
Pre-operative area	9 (40.9)
Operating room	0 (0.0)
Post-operative recovery (PACU) area	3 (13.6)
Hospital room post-operatively	8 (36.4)
Other	1 (4.5)
Misgendering experiences with hospital members	
At surgical check-in or in the pre-operative phase (n = 20)	
Registration staff	9 (45.0)
Security	2 (10.0)
Nurses	8 (40.0)
Nursing aids/technicians	12 (60.0)
Anesthesia providers	1 (5.0)
Surgeons	0 (0.0)
Resident doctors	1 (5.0)
Medical students	1 (5.0)
Other patients	0 (0.0)
Other patients' family/friends	0 (0.0)
Other	2 (10.0)
In the operating room (n = 4)	
Nurses/technicians	4 (100.0)
Anesthesia providers	0 (0.0)
Surgeon	0 (0.0)
Resident doctors	0 (0.0)
Medical students	0 (0.0)
Other	0 (0.0)
In the post-operative recovery phase (PACU) (n = 7)	
Assigned nurse	2 (28.6)
Another PACU nurse	2 (28.6)
Nursing aids/technicians	4 (57.1)
Anesthesia providers	0 (0.0)
Surgeon	1 (14.3)
Resident doctors	1 (14.3)
Medical students	1 (14.3)
Food servers	0 (0.0)
Maintenance/cleaning staff	0 (0.0)
Other patients	1 (14.3)
Other patients' family/friends	4 (57.1)
Other	1 (14.3)
In the post-operative hospital admission (n = 10)	
Assigned nurse	4 (40.0)
Another nurse	5 (50.0)
Nursing aids/technicians	3 (30.0)
Surgeon	0 (0.0)
Other consulting doctors (medicine, general surgery, urology, psychiatry, infectious disease)	0 (0.0)
Resident doctors	1 (10.0)

Table 3 (continued)

Characteristic	No. (%)
Medical students	1 (10.0)
Social workers/case managers	1 (10.0)
Lab-drawing technicians (phlebotomists)	1 (10.0)
Food servers	2 (20.0)
Dieticians	0 (0.0)
Physical/occupational therapists	1 (10.0)
Pastors/chaplains	0 (0.0)
Hospital administration	1 (10.0)
Maintenance/cleaning staff	0 (0.0)
Other patients	0 (0.0)
Other patients' family/friends	0 (0.0)
Other	2 (20.0)

sociopolitical changes defined gender identity and gender dysphoria as terms that are slowly being acknowledged by society as a whole [24]. Because the societal acceptance of non-gender-confirming individuals is recent and slow, those with gender dysphoria have faced discrimination and mistreatment in family life, social settings like school and work, and random instances in public or day-to-day life.

In the pursuit of achieving gender congruity, gender dysphoric patients seek gender-affirming medical and surgical treatment, with multiple studies demonstrating the significant impact these can have on patients' quality of life [10–12]. Because gender dysphoria is a psychiatric diagnosis, one must consider everything that could affect a patient's mental health, expectations, and experience surrounding GAS as well as impact a patient's perceived overall surgical outcome [18]. For readers who may have limited experience and may not understand the harm that can come from misgendering, imagine the following patient: After suffering from gender dysphoria and significant harassment, bullying, and discouragement due to her transgender identity, a patient at the age of 28 decides to seek gender-affirming care. She changes her pronouns and legal name and undergoes 2 years of hormone replacement therapy. She is now 30 years old and has just undergone the first stage of her transition, a penile inversion vaginoplasty. The nurse caring for her continuously addresses her as "he/him." She described her experience in the survey, "What else could I possibly do to get people to see me as female? I've literally had my genitals changed. It was not intended maliciously, I don't think—just a careless, unthinking usage of the wrong pronoun; I'm sure she didn't even notice that she had done it. But it definitely made me uncomfortable."

The luxury of a high-volume GAS practice is the ability to constantly innovate and improve overall patient care. Anecdotally, of patients more dissatisfied with their overall surgical experience and result, many cited issues of

Table 4 Examples of patient experiences of misgendering

Examples of misgendering experiences
“A nurse was checking on me at the same time as the lady taking my food order. The food lady asked, ‘What do you want mister?’ The nurse chimed in with ‘He probably isn’t hungry.’ I voiced to them both that I have a vagina and I am a female. The food lady said, ‘Oh sorry mister.’ I said I am a female. This went on for several minutes before they left. I didn’t eat that meal. The two people I just stated made me want to just die. It was horrible.”
“I was misgendered based just on my voice. This is very discouraging especially when you know you are there for gender affirming care.”
“As a trans person, you can sense when people are uncomfortable, sometimes not by action, but by the intense/stiff control they have over themselves in your presence. A focus on not making eye contact, pursed lips, very, very focused on whatever they are doing.”
“She misgendered me at least 6 times that I recall. I had to call her out on it and verbally ask her to stop. It felt like she was intentionally doing it. I was shocked how much it happened. She apologized and went right back to it 5 min later. I was ready to check myself out of the hospital.”
“While I’m dilating, she turns to the other nurse on duty that was in my room and says, ‘Girl you should see how they do this, the scrotum skin becomes the labia,’ and so on. I was done.”
“One nurse misgendered me a few times (using he/him pronouns instead of she/her). I found this distressing given that I had just had bottom surgery. I found myself thinking, ‘What else could I possibly do to get people to see me as female? I’ve literally had my genitals changed.’”
“The woman who wheeled me out when I was leaving consistently misgendered me.”
“One of my nurses was clearly inexperienced with this procedure, as she appeared shocked to see my dilators, and I had to explain to her what they were and how they were used. Later, I learned that this nurse did not normally work in this area, and she had been pulled in to cover for other absences. While she was respectful of my gender, having to explain (and justify) dilation felt triggering.”
“Hospital staff was mentioning my gender identity when it was not needed and was asking me personal questions about my gender identity and my genitals.”

Table 5 Quality of care and areas for improvement

Characteristic	No. (%)
Personal importance of: ^a	
Correct acknowledgement of gender identity (<i>n</i> = 165; mean ± SD)	9.4 ± 1.3
Correct acknowledgement of preferred name (<i>n</i> = 163; mean ± SD)	9.4 ± 1.4
Willingness to return to the same health care system if: ^b	
Frequently misgendered and/or treated negatively because of your gender identity (<i>n</i> = 133; mean ± SD)	3.4 ± 3.6
Always addressed by preferred pronouns and name and treated like cis-gendered patients (<i>n</i> = 160; mean ± SD)	9.5 ± 1.5
Changes that would lead to improvement in patient feelings of gender congruence during hospital stay (<i>n</i> = 130)	
Name tags with preferred name and pronouns	67 (51.5)
Signs on curtains/doors with preferred name and pronouns	68 (52.3)
Changes in the electronic medical record with preferred name and gender identity	105 (80.8)
Only people who are LGBTQ+ supporters are allowed to participate in your care	63 (48.6)
Other	17 (13.1)
Increased training of hospital staff regarding gender identity	12/17 (70.6)
Remove use of “preferred” when asking for patients’ names and pronouns	3/17 (17.6)
Hiring transgender consultants	1/17 (5.9)
Policy changes in insurance coverage and healthcare	2/17 (11.8)

^aRated on a scale of 0–10 (0 = not important at all; 10 = incredibly important)

^bRated on a scale of 0–10 (0 = would never come back; 10 = would come back)

mistreatment in the clinic or hospital setting surrounding their procedure and focused more on those negative interactions than any functional or aesthetic surgical concerns. Several studies demonstrate that increased stress, anxiety, or emotional turmoil perioperatively lead to worse outcomes [25–28]. We believed this relationship would be more profound in already at-risk GAS patients, the population of interest in this study.

The majority of patients had overwhelmingly positive experiences, having never being misgendered. This should be the expectation, especially at a center of excellence for GAS. Our practice has dedicated office staff, operative team, resident physicians, physician assistants, and hospital floor for patients undergoing GAS, and all individuals are trained regarding proper care for patients with gender dysphoria [20]. Despite measures taken by the senior author to create

Table 6 Quality improvement initiatives to minimize misgendering

Quality improvement initiatives

1. Health-system-wide training of all personnel on gender dysphoria
2. Non-binary EMR system with natal/legal and stated personal information
3. LGBTQ+ liaison to oversee interpersonal and electronic barriers to gender identity inclusion
4. Remediation and/or discipline for personnel who continue to misgender patients
5. Confidential avenues and/or patient liaisons for patients to navigate instances of misgendering or mistreatment
6. LGBTQ+ -allegiant practices such as pronouns and nametags for all personnel and patients, LGBTQ+ patient advocates, LGBTQ+ symbols, etc

a safe environment for his patients, a significant proportion were still misgendered during their hospital course. Table 4 features a sample of patients' misgendering experiences, and one can easily imagine their frustration and trauma. Although a patient may have a successful surgery with no complications, one episode of misgendering can deteriorate an otherwise perfect surgical outcome.

This study hopefully highlights to the medical community that a substantial proportion of gender dysphoric patients suffer from misgendering within the hospital, a place aimed at promoting healing and recovery. We identified QI initiatives to address these issues and allow for a safer and more respectful experience. Primary takeaway methods for improving care include (1) widespread education and training on gender identity and treatment of patients with gender dysphoria and (2) EMR changes making reporting of name, pronouns, and gender identity readily accessible by all healthcare personnel.

Transgender and gender diverse individuals experience significant stigma within three levels of society: structural, interpersonal, and individual [29]. Each of these is seen in the different forms of misgendering experienced by our patients during their hospital stay. Language used by medical institutions and personnel can cause additional marginalization of TGDI patients and result in further pathology [30], thus highlighting the need to address each level of stigmata perpetuated within the hospital.

Nearly every act of misgendering was committed by someone not on the immediate care team (surgeon, anesthesiologist, resident, charge nurse). Many misgendering instances started with patient registration and were perpetuated by current limitations of the EMR system. Previous studies have estimated documentation of gender identity within the EMR to be missing in up to 65.0% of patients [31]. Patients frequently stated the registration staff was confused or judgmental when their stated name or gender identity differed from their legal name or assigned sex at birth. Even when registration staff were respectful, respondents expressed frustration because the EMR system only provided binary "female" and "male" terms, some staff refused to enter gender identity over assigned sex at birth, and no EMR terms existed for non-binary individuals. Furthermore,

legal names, not stated names, were entered into the EMR and placed on bracelets, which served as a large source for misgendering, especially if patients had traditionally gender-specific names. Even when patients reported legally changing their name prior to GAS, 65.8% still reported being misgendered ($n = 50/76$). Multiple patients cited instances in Pre-Op, PACU, and on the floor where healthcare personnel unintentionally or innocently misgendered them because they used the listed name and/or gender in their chart. Healthcare personnel were apologetic once corrected, and patients were understanding, though rightfully frustrated, that EMR limitations perpetuated their misgendering.

These limitations of the EMR serve as an example of the structural stigma, or "policies and practices resulting in restricted opportunities for stigmatized people [29]," experienced by TGDI patients. Not only does EMR result in incomplete collection of patient data (e.g., chosen name, pronouns, gender identity, sex at birth), but missing information can also render transgender and gender non-conforming individuals invisible to policymakers. The cycle perpetuates itself, with minimal EMR changes resulting from a lack of policy change. Structural challenges also include insufficient guidelines regarding education and training of medical personnel about care for TGDI patients, or even basic knowledge regarding how to respectfully address or refer to these patients [29]. Oftentimes, this lack of knowledge results in TGDI patients being left with the burden of educating healthcare personnel, an onus that should not be theirs. These systemic stigmata should be corrected using standardized training of intake staff and EMR modifications led by those with formalized LGBTQ+ training.

The other primary source of misgendering—and one more concerning—stems from a fundamental lack of patient respect by hospital employees. Many patients detailed encounters with specific individuals who "intentionally" misgendered them—nurses refusing to call them by correct pronouns even when specifically asked, refusing to read standard pre- or post-operative instructions, or non-primary nurses or other non-nursing staff coming into their rooms to "look at me and my genitals." Others reported overhearing staff discuss how "freaked out" they were by the patient's

GAS procedure. These interpersonal stigmas are a much more difficult problem to overcome, but could be improved with widespread training, raised awareness, and remediation.

This study identified multiple QI initiatives for adoption to improve gender-affirming care (Table 6). Most important is training of all healthcare personnel on gender identity and gender dysphoria. Just as all healthcare workers should respect ethnic, cultural, and religious customs and preferences, they should respect patients' gender identities. Many suggested having this training overseen by someone with dedicated training in the care of TGDI patients to ensure the correct wording and motivations for why concepts like pronouns and names are important are conveyed. All personnel should be subject to evaluation and/or reporting to identify those not fully respectful of gender identity. Similar to someone subject to discipline upon mistreating a patient based on race or religion, a healthcare worker who repeatedly misgenders patients should undergo remediation. While each hospital must create its own policies, we believe it is important that, as healthcare providers, we set aside personal biases and provide the optimal care for the patient in front of us.

Alongside training, hospital systems can cultivate LGBTQ+ -friendly communities by having all patients and personnel wear name tags with pronouns, helping normalize the practice of recognizing others' pronouns. The patients who made this suggestion also recommended having a TGDI liaison oversee the implementation of new practices. For instance, some respondents stated that the pronouns should not be called "preferred," as that would suggest that calling them by other preferences is permissible: "They're not my 'preferred' name or 'preferred' pronouns. They are my name and my pronouns." Furthermore, certain symbols showing support for the LGBTQ+ community may help patients feel supported: "I really appreciated [my doctor] wearing the trans flag lanyard. It was very comforting."

Another major QI initiative is to make the EMR more patient identity-centric. Many unintentional misgendering interactions were perpetuated by the EMR only allowing entry of assigned sex at birth and/or legal names. The EMR should provide separate entries for assigned sex at birth, gender identity, pronouns, stated name, and legal name. Patient information on charts, wristbands, order forms, etc. should list this information to minimize misgendering. The EMR should be regularly reviewed and updated with a liaison, especially as LGBTQ+ terms evolve to be ever-more inclusive and respectful.

Major considerations for our practice over recent years have been the challenges associated with changes in hospital policies as the result of COVID-19, including reductions in non-emergent surgeries and restrictions on the number and length of stay of visitors. Limited access to expert clinical care created difficulties for TGDI patients to access gender-affirming hormone therapies and consequently created delays in undergoing the GAS they had long been awaiting. When

time came to undergo their surgery, the stress of undergoing the procedure was compounded by visitation restrictions that removed the critical support system many GAS patients previously depended on. As COVID-19 restrictions ease, we hope to overcome these challenges in order for TGDI patients to receive the full scope of support during their GAS process.

An incredible amount of progress has been made within medical and surgical fields to treat gender dysphoric patients. Equally as important is ensuring patient comfort, respect, and safety in the healthcare system. While patients may experience successful GAS procedures with minimal postoperative complications, a misgendering episode can deteriorate the surgical outcome. This study is the first evaluating the incidence and characterizing the types of misgendering that gender dysphoric patients experience perioperatively. While we hope to raise awareness of misgendering in the healthcare system and prompt QI initiatives at both gender-affirming centers and hospitals, there are some limitations. This is a retrospective survey at risk for response bias, with less than half of patients responding. This study was also purely observational; therefore, the next step is to create and implement QI initiatives to minimize misgendering and perform pre- and post-surveys to outline how other centers can translate these into their practices.

Conclusions

Patients undergoing gender-affirming care are a vulnerable population given the psychosocial ramifications of their gender dysphoria and the slow societal adoption of transgender-friendly terminology and overall acceptance. Despite advancements in GAS to allow for gender congruence and reduced mental distress, patients still suffer from intentional and unintentional misgendering. In the hospital, it should be expected that all patients are respected and placed in a safe environment promoting healing and recovery. This is the first study reporting the incidence of misgendering in the perioperative setting and identifying QI action items to achieve a more transgender-welcoming healthcare system.

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Data Availability Data not available due to ethical restrictions, including sensitive information collected in the surveys that could be used to identify patients who chose to respond anonymously.

Declarations

Ethics approval This study was performed in line with the principles of the Declaration of Helsinki. IRB approval was granted by the MedStar Health Research Institute (11/18/2021, STUDY00004465).

Consent to participate Informed consent was obtained from all individual participants included in the study.

Competing interests The authors declare no competing interests.

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