



# ORIGINAL ARTICLE

# Gender-Affirming Surgery

# Shifting Paradigms: A Deep Dive Into Public Perceptions of Gender-affirming Surgery

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**Background:** Given the growing demand for gender-affirming surgery (GAS) in recent years, it is essential to explore the public perceptions of GAS. Understanding the public's opinions and attitudes toward GAS will provide valuable insights for shaping educational initiatives to enhance public knowledge and awareness.

**Methods:** This cross-sectional study used the Prolific Academic platform to distribute an online survey among adult participants residing in the United States in August 2023.

**Results:** Of 1005 completed survey responses, 50% of respondents were 41 years of age or older, 51% were women, and 73% were White. A total of 18% identified as part of the LGBTQIA+ community, and most (37%) resided in the southern United States. The majority of participants (78%) did not personally know anyone who underwent GAS, and 74% believed that plastic surgeons mainly perform GAS. Only 22% felt healthcare professionals were well qualified to provide genderaffirming care. Media's effect on GAS acceptance was assessed to be mostly negative (33%) or very negative (12%). About 33% favored both public and private health insurance coverage for GAS, whereas 35% opposed insurance coverage. Most respondents strongly agreed (32% and 34%) or agreed (33% and 37%) that GAS aligns with gender identity and improves mental health. Regarding minimum age, most partakers (43%) supported 18 years, whereas 38% endorsed 21 years. Conclusions: This study sheds light on the public perceptions of GAS. These insights underscore the need for targeted educational efforts to increase awareness, rectify misconceptions, and promote a deeper understanding of GAS within society. (Plast Reconstr Surg Glob Open 2025; 13:e6472; doi: 10.1097/GOX.0000000000006472; Published online 21 January 2025.)

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# INTRODUCTION

Over 1.6 million individuals in the United States currently identify as transgender. With a more than 100-fold increase in surgical cases since 2010, genderaffirming surgery (GAS) is a rapidly evolving field of medicine dedicated to alleviating the incongruence experienced by transgender and gender-diverse individuals (TGDIs). It encompasses a range of procedures within plastic surgery, such as gynecomastia correction and breast reconstruction, supporting the gender affirmation process for individuals beyond the transgender community. 2-4

Although the vast majority of current data underscores the profound effect of GAS on mental health outcomes, the topic remains under intense scrutiny due to political and societal pressures.<sup>5,6</sup> Within the last 6 months, the United States has seen vast shifts in the legislative landscape, which may complicate the delivery of genderaffirming care.<sup>7-9</sup> The political discourse surrounding GAS

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has been demonstrated to have a wide array of opinions and differing levels of support. At its core, the discussion centers around the ability of TGDIs to receive a surgery that is not only life-altering but potentially life-saving. <sup>10</sup> Although political controversy presently dominates our nation's discussion surrounding GAS, little attention has been placed on how the public perceives GAS and the effect it has on TGDIs.

Therefore, this study aimed to gauge the public perception of GAS. We seek to assess the current opinions related to GAS procedures with the goal of identifying instances of agreement or misconceptions of the field. The findings obtained from this study may influence future educational efforts, enhancing the public comprehension of this surgical procedure, breaking down barriers to access to care, and addressing the disparities encountered by TGDIs.

#### **METHODS**

The institutional review board of the University Hospital Regensburg reviewed and approved this cross-sectional study. The study adhered to the Strengthening the Reporting of Observational Studies in Epidemiology reporting guideline for cross-sectional studies.<sup>11</sup>

### **Survey Instrument**

An online survey developed using Google Forms was distributed via the Prolific Academic platform (Prolific Academic Ltd, London, United Kingdom) in August 2023. (See survey, Supplemental Digital Content 1, which displays the complete survey with questions and answer choices, http://links.lww.com/PRSGO/D803.)12 The pilot test for the survey was executed after a rigorous methodology to ensure its efficacy. A sample of 20 individuals, representative of the larger target demographic, was assembled for the initial phase. Post survey, participants were asked for a detailed evaluation of the instrument. The preliminary data underwent statistical analysis to determine any procedural discrepancies and an assessment of individual response rates, the variability of responses, and the coherence across the survey. The insights derived from this pilot phase prompted precise refinements to the survey tool, to augment its precision, dependability, and overall utility. After the test run, the same survey was distributed to the study population. Individuals had to be US residents of at least 18 years of age to participate. Upon successful completion, participants were compensated equally. In addition to demographic details, study participants self-reported their exposure, perception, and understanding of GAS procedures. We used the 2-step method described by Lagos and Compton<sup>13</sup> to collect data on the participant's gender. A 5-point Likert scale was leveraged to characterize respondents' perceptions and opinions regarding GAS. The survey captured 4 overarching themes: (1) awareness and familiarity with GAS, (2) education and perception of GAS, (3) beliefs and attitudes toward GAS, and (4) safety and access barriers of GAS. By segregating the survey's inquiries into these 4 comprehensive categories, we aimed to systematically explore participants' perceptions, attitudes, knowledge, and beliefs regarding GAS.

# **Takeaways**

**Question:** This study explores public perceptions of gender-affirming surgery (GAS) in the United States.

**Findings:** Surveying 1005 US residents, findings reveal mixed awareness and familiarity with GAS, with many believing plastic surgeons are the primary providers. The majority view GAS positively for mental health and identity alignment, yet opinions vary on medical necessity and unrestricted access. Public perception of GAS safety is diverse, and there is debate over age limits for access.

**Meaning:** This study highlights the need for improved public education on GAS, addressing misconceptions and promoting understanding, especially regarding its mental health benefits and role in supporting transgender and gender-diverse individuals.

#### **Statistical Analysis**

All analysis was performed using SPSS Statistics version 28.0 (IBM, Armonk, NY). The threshold for statistical significance was set at P values less than 0.05.

The response choices for survey inquiries that assessed participants' perceptions, attitudes, knowledge, and beliefs about GAS were formulated using Likert-type scale response anchors, as documented in the work by Vagias<sup>14</sup> from Clemson University's International Institute for Tourism and Research Development.

# **RESULTS**

#### **Demographic Data**

The study population included 1005 participants, of whom half were 41 years of age or older (n = 502; 50%) and half were 40 years of age or younger (n = 503; 50%). The majority of the study cohort were women (n = 511; 51%), with 453 (45%) identifying as men and 21 (2.1%) participants as nonbinary. Overall, 16 (1.6%) transgender individuals responded to the questionnaire (6 transgender women and 10 transgender men). More than 1 in 3 respondents were from the southern United States (n = 368; 37%) versus 20% each living in the West (n = 199; 20%), Midwest (n = 215; 21%), and Northeast (n = 223; 22%). White respondents accounted for 73% (n = 732) of the study population, whereas Black/African American, Asian, and Hispanic respondents amounted to 11% (n = 106), 8.4% (n = 84), and 8.6% (n = 86), respectively. In this study, 184 (18%) participants considered themselves to be part of the LGBTQIA+ community—an acronym standing collectively for lesbian, gay, bisexual, transgender, queer or questioning, intersex, and asexual people, with the + holding additional space for new diverse gender and sexual identities. Table 1 provides a detailed overview of the survey participants' demographics and characteristics.

#### Awareness and Familiarity of GAS

The majority of the study population (n=781;78%) did not know anyone who had undergone GAS. A similar percentage of participants (n=740;74%) believed that primarily plastic surgeons offer GAS, with only 1 in

**Table 1. Study Participants' Demographics and Characteristics** 

Demographics	n = 1005
Sex	
Female	511 (51)
Male	453 (45)
Nonbinary	21 (2.1)
Transgender female	6 (0.6)
Transgender male	10 (1.0)
Unknown	4 (0.4)
Age, y	
≤21	13 (1.3)
21–25	83 (8.3)
26–30	132 (13)
31–35	137 (14)
36–40	138 (14)
≥41	502 (50)
US region	
South	368 (37)
West	199 (20)
Midwest	215 (21)
Northeast	223 (22)
Race	
American Indian or Alaskan native	6 (0.6)
Asian	84 (8.4)
Native Hawaiian or Pacific Islander	2 (0.2)
Black or African American	106 (11)
White	732 (73)
Other or unknown	74 (7.4)
Ethnicity	
Hispanic	86 (8.6)
Identity	
LGBTQIA+	184 (18)
Described as a (0/) supless stated athermics	

Presented as n (%), unless stated otherwise.

LGBTQIA+, lesbian, gay, bisexual, transgender, queer, intersex, and asexual people, with the + holding additional space for new diverse gender and sexual identities.

4 respondents considering healthcare professionals to be well (n = 218; 22%) or very well (n = 47; 4.7%) qualified to provide GAS.

About one-third of the study participants described themselves as very/extremely familiar (n = 347; 35%), moderately familiar (n = 377; 38%), and slightly/not familiar (n = 321; 32%) with the concept of GAS. Cumulatively, 59% (n = 586) rated public knowledge as low (n = 418; 42%) and very low (n = 168; 17%). Nevertheless, the study cohort appeared ambivalent on whether more education and awareness initiatives ought to be launched in schools (yes: n = 410; 41% versus not sure: n = 229; 23% versus no: n = 366; 36%). Further details regarding participants' familiarity, consciousness, and comfort when discussing GAS can be found in Table 2.

# **Education and Perception of GAS**

Social media (n = 505; 50%) and television (n = 241; 24%) are the main channels through which information about GAS is disseminated. The results indicate that media representation, education, and awareness campaigns, cultural or religious beliefs, social norms, personal experiences, and legal and policy frameworks are believed to contribute to the perception of GAS in society, with varying degrees of importance attributed to each factor. However, the effect of media representation on public understanding and acceptance of GAS was predominantly rated as negative (n = 332; 33%) or very negative (n = 120; 12%). Study participants were of split opinion on the accessibility and insurance coverage of GAS: although 43% (n = 434) considered GAS (very) accessible in the United States, nearly 30% deemed GAS either inaccessible (n = 233; 23%) or very difficult to receive (n = 47; 4.7%). Similarly, one-third (n = 333; 33%) of the participants favored GAS coverage by

Table 2. Detailed Information on the Study Participants' Answers to Questions Regarding Awareness and Familiarity

How familiar are you with the concept of gender-affirming surgery?	Extremely familiar	Very familiar	Moderately familiar	Slightly familiar	Not familiar at all	
	108 (11)	239 (24)	377 (38)	266 (27)	55 (5.5)	
Which surgical specialty do you think most commonly offers gender-affirming surgery?	Plastic surgery	Oromaxil- lofacial surgery	Neurosurgery	General surgery	Orthopedic surgery	Vascular surgery
	740 (74)	23 (2.3)	14 (1.4)	171 (17)	9 (0.9)	48 (4.8)
Do you know anyone who has undergone	Yes	No				
gender-affirming surgery?	224 (22)	781 (78)				
Have you had any conversations or discussions about gender-affirming surgery in	Yes, frequently	Yes, occa- sionally	No, not at all			
your social circles (family, friends, colleagues, etc)?	62 (6.2)	551 (55)	392 (39)			
How comfortable are you discussing gender- affirming surgery with others?	Very comfortable	Comfortable	Neutral	Uncomfortable	Very uncomfortable	
	142 (14)	346 (34)	351 (35)	102 (10)	64 (6.4)	
How would you rate the overall level of public	Very high	High	Moderate	Low	Very low	
awareness and understanding of gender- affirming surgery in your community?	15 (1.5)	61 (6.1)	343 (34)	418 (42)	168 (17)	
How well do you think healthcare professionals are trained to provide gender-affirming	Very well	Somewhat well	Neutral	Not well	Not at all well	
care and support?	47 (4.7)	218 (22)	336 (33)	299 (30)	105 (10)	
Do you think there should be more education	Yes	Not sure	No			
and awareness initiatives about gender- affirming surgery in schools and educa- tional institutions?	410 (41)	229 (23)	366 (36)			

Table 3. Summary of Survey Items and Responses Related to Education and Perception of GAS

What factors do you believe contribute to the percep- tion of gender-affirming surgery in society? (Select all that apply)	Media representation, education and aware- ness campaigns, cultural or religious beliefs, social norms, personal experiences, legal and policy framework	Media representa- tion, cultural or religious beliefs, social norms	Media repre- sentation	Media representa- tion, social norms	Media representa- tion, education and awareness campaigns, cul- tural or religious beliefs, social norms	Other
	144 (14)	136 (14)	75 (7.5)	56 (5.6)	51 (5.1)	543 (54)
Where have you seen or learned of gender-	Social media	Search engine	Television	Personal experience	Not applicable	
affirming surgery?	505 (50)	98 (9.8)	241 (24)	100 (10)	61 (6.1)	
How do you perceive the accessibility of gender-affirming surgery in the	Very accessible	Accessible	Neither inac- cessible nor accessible	Inaccessible	Very inaccessible	
United States?	59 (5.9%)	375 (37%)	291 (29%)	233 (23%)	47 (4.7%)	
How important do you think it is for society to recognize	Extremely important	Very important	Moderately important	Slightly important	Not at all important	
and support individuals who undergo gender- affirming surgery?	212 (21)	223 (22)	196 (20)	145 (14)	229 (23)	
In your personal opinion: Do you think gender-affirming surgery should be covered	Yes, both should cover it	Yes, public should cover it	Yes, private should cover it	I am not sure	No	
by public or private health insurance?	333 (33)	26 (2.6)	142 (14)	151 (15)	353 (35)	
How do you perceive the	Very negative	Negative	Neutral	Positive	Very positive	Other
effect of media representa- tion on public understand- ing and acceptance of gender-affirming surgery?	120 (12)	332 (33)	372 (37)	106 (11)	20 (2.0)	55 (5.5)

Table 4. Five-level (Dis)agreement Questionnaire and Study Participants' Responses Regarding Their Attitudes and Beliefs Toward GAS; Each Question Was Prefaced by the Following Prompt: "Please Indicate to What Extent You Agree With the Following Statement"

Gender-affirming surgery is performed to help individuals	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
align with their gender identity	318 (32)	332 (33)	183 (18)	56 (5.6)	116 (12)
Gender-affirming surgery has a positive effect on an	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
individual's mental health and well-being	250 (25)	252 (25)	239 (24)	84 (8.4)	180 (18)
Geographical location plays a role in access to gender-	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
affirming care	346 (34)	376 (37)	187 (19)	56 (5.6)	40 (4.0)
Gender-affirming surgery is a medical necessity for	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
individuals with gender dysphoria	146 (15)	232 (23)	273 (27)	135 (13)	219 (22)
Do you believe that individuals should have the right to	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
access gender-affirming surgery without restrictions?	133 (13)	245 (24)	253 (25)	202 (20)	172 (17)

both public and private health insurance, whereas 35% (n = 353) generally opposed any insurance coverage. Table 3 summarizes all survey responses regarding information distribution, education, and perceptions of GAS.

# **Beliefs and Attitudes Toward GAS**

The vast majority of the study cohort strongly agreed (n = 318; 32% and n = 346; 34%) or agreed (n = 332; 33% and n = 376; 37%) with the following 2 statements: "Genderaffirming surgery is performed to help individuals align with their gender identity" and "Gender-affirming surgery has a positive effect on an individual's mental health and well-being." Regarding the question of whether GAS is a medical necessity for people experiencing gender dysphoria, 232 (23%) participants agreed, 273 (27%) abstained, and 219 (22%) strongly disagreed. A similar distribution pattern was noted when participants were asked about an

unrestricted right to access GAS (24% [n = 245] agreed versus 25% [n = 253] abstained versus 20% [n = 202] disagreed). Table 4 provides further information on the study participants' stance and viewpoint on GAS.

#### Safety and Access Barriers of GAS

The overall safety of GAS was assessed heterogeneously:  $358 \ (36\%)$  regarded GAS as (very) safe,  $319 \ (32\%)$  selected "neither unsafe nor safe," and  $328 \ (33\%)$  participants considered GAS to be (very) unsafe. Still, a higher share of participants (n = 430; 43%) favored that GAS should be more widely available (compared with  $341 \ [34\%]$  who were against wider availability). Interestingly, 43% (n = 435) and 38% (n = 382) advocated a minimum age of 18 and 21 years, respectively, whereas only  $32 \ (3.2\%)$  participants endorsed no age limit. Table 5 presents a percentage breakdown of all responses.

Table 5. Overview of the Study Participants' Responses to Questions Regarding the Safety and Access Barriers of GAS

			,	,								
Do you think that	Yes	I am not sure	No									
gender-affirming surgery should be more widely available?	430 (43)	234 (23)	341 (34)									
In your personal	10	12	13	14	15	16	17	18	19	20	21	No age limit
opinion, what should — be the minimum	3 (0.3)	5 (0.5)	7 (0.7)	8 (0.8)	10 (1.0)	63 (6.3)	9 (0.9)	435 (43)	10 (1.0)	41 (4.1)	63 (6.3) 9 (0.9) 435 (43) 10 (1.0) 41 (4.1) 382 (38)	32 (3.2)
age requirement for individuals seeking												
gender-affirming surgery?												
Please give a number.												
What factors could	High cost, lack of	High cost, lack of	High cost	High cost,	High cost,	Other						
pose barriers for	qualified healthcare	qualified health-		lack of	stigma and dis-							
individuals seeking	providers, long wait-	care providers,		qualified	crimination,							
gender-affirming	ing lists, stigma and	stigma and discrim-		health-	legal or policy							
surgery?	discrimination, legal	ination, legal or		care	restrictions							
	or policy restrictions	policy restrictions		providers								
	316 (32)	75 (7.5)	74 (7.4)	59 (5.9)	50 (5.0)	431 (43)						
How safe do you	Very safe	Safe	Neither	Unsafe	Very unsafe							
perceive gender-			unsafe									
affirming surgery?			nor safe									
	63 (6.3)	295 (29)	319 (32)	178 (18)	150(15)							

#### **DISCUSSION**

To our knowledge, our study stands among the pioneering efforts to provide a comprehensive view of public perceptions toward GAS. The results indicated that public awareness and familiarity with GAS were mixed, with the public's knowledge of GAS perceived to be low. The beliefs and attitudes toward GAS were generally positive, with a majority agreeing that GAS helps individuals align with their gender identity and has a positive effect on mental health, though views on its medical necessity and unrestricted access varied. Moreover, safety perceptions of GAS were diverse, with debates regarding age limits.

Due to the increasing demand and heightened awareness, GAS is an expanding subfield in plastic surgery, with an annual growth of 155% reported by the American Society of Plastic Surgeons in 2017. 15 Approximately 74% of respondents in our study believed that plastic surgeons primarily perform GAS, whereas only 22% perceived healthcare professionals as suitably qualified for such procedures. Our study mirrors the scientific consensus that underlines the necessity for formal curricula that ensure surgical residents are equipped to provide evidence-based care for transgender patients.<sup>16</sup> Despite the evolving landscape, concerns persist, with studies pointing out that GAS training remains inconsistent across specialties and regions.<sup>17</sup> As the field progresses, standardizing curricula and training experiences, guided by consensus-driven frameworks, can better prepare surgical residents for the diverse clinical and surgical interactions with transgender patients. 18,19

In our study, more than 75% of participants lacked personal acquaintances who had undergone GAS. Although the respondents primarily believed that public GAS knowledge is either low or very low, opinions were divided regarding the necessity of increased efforts and initiatives within educational institutions. A recent survey involving 10,000 individuals nationwide demonstrated a nearly even split among Americans concerning the instruction of gender identity in elementary schools, with 41% expressing support or strong support for such measures whereas 38% voiced opposition or strong opposition. This overarching sentiment of acceptance or lack thereof toward gender-diverse individuals significantly shapes public perceptions and understanding of GAS, a procedure specifically geared toward the TGDI community.

Respondents in our study primarily acquired knowledge about GAS through social media or television. They believed that GAS is portrayed negatively through these mediums, thereby influencing the formation of public attitudes. As the use of social media and physician-rating websites influence the marketability and practice of plastic surgery, it is important to consider the unique environment of social media where individuals can share and compare experiences, outcomes, and desirable aesthetic standards; often intensifying interest in GAS.<sup>21</sup> In 2020, Ayyala et al<sup>22</sup> discovered that the majority of videos on YouTube were driven by transgender patient experiences, often laden with bias, rather than objective and balanced medical information. Chatbots such as ChatGPT may also be a source of information for GAS and should be evaluated

to ensure they do not spread misinformation.<sup>23</sup> Cho et al<sup>24</sup> demonstrated the power of social media as a tool for branding and patient education in plastic surgery without establishing concrete guidelines for GAS. However, when Maisner et al<sup>25</sup> investigated social media content related to GAS, a limited representation of LGBTQIA+ content in plastic surgery residency programs' social media accounts was identified. This suggests that high-quality, unbiased, and informative content about GAS by medical institutions, professionals, and LGBTQIA+ advocacy groups could be potential avenues for reshaping perceptions.

In our analysis, respondents affirmed that GAS is performed to help individuals align with their gender identity. Despite acknowledging the mental health benefits of GAS, less than a quarter of respondents believed that GAS is a medical necessity or that individuals should have an unrestricted right to access GAS. Ambivalence and/ or disagreement of GAS being viewed as a medical necessity could be influenced by what society has traditionally deemed as a medical necessity (eg, life-saving emergency surgery) and what has been portrayed in various forms of media, a major source of knowledge for our respondents on GAS.<sup>26</sup> This link warrants enhanced public education regarding criteria for medical necessity, incorporating a broader scope of the term "medical necessity." An updated and evidence-built criteria catalog may also reframe the public and political weight of conventional medical necessity parameters versus the distinctive health obstacles experienced by marginalized populations such as TGDIs, ultimately fostering a more equitable healthcare landscape.<sup>27</sup>

In our study, divergent perspectives emerged regarding the accessibility and insurance coverage of GAS, with a majority of participants viewing GAS as accessible, whereas approximately 30% considered it inaccessible. Similarly, some respondents favored the comprehensive inclusion of GAS within both public and private health insurance plans, although others exhibited opposition. Our study aligns with the national discordance highlighted by a 2022 study, where a greater percentage of Americans voiced opposition (44%) compared with those in favor (27%) of health insurance companies being mandated to cover medical care for gender transitions.<sup>28</sup> Current literature has highlighted the disparities in insurance coverage for GAS, with bilateral mastectomy receiving significantly higher coverage compared with breast augmentation, although only a minority of insurance policies were favorable for facial feminization surgery and bottom surgery.<sup>29–31</sup> In addition, Cohen et al<sup>32</sup> revealed a spectrum of inconsistencies in insurance coverage nationally for specific gender-affirming procedures such as nipple-areola complex reconstruction, chest feminization, and vulvoplasty. This augmentation of our findings suggests that the divergent perceptions we observed regarding accessibility and insurance coverage could emanate from the diverse and incongruent policies offered by insurance providers.

Although most respondents agreed that GAS should be more widely available, almost all agreed that the age limit to access GAS should be at least 18 years. This is in congruence with restrictions set by several states and most insurance providers, which have a minimum age requirement of 18 years to access GAS. 1,30 Likewise, Burton et al33 underscored insufficient support for adolescents receiving GAS compared to that for adults. Given that suicide ideation is 7.6 times higher among transgender youth (6–17), it is essential to take into account that the majority of transgender youth who have undergone GAS (most commonly masculinizing chest surgery) report reduced anxiety, reduced depressive symptoms, decreased suicide ideation, and near zero reports of regret.<sup>34–37</sup> Ultimately, further research is warranted to determine the GAS age limit that unifies patient safety, mature decision-making, and optimal postoperative outcomes as well as a deeper dive into regret (eg, true gender-based regret, medical complications leading to regret).

Although a significant portion of our participants expressed uncertainty or disagreement regarding the safety of GAS, existing evidence consistently indicates that GAS is generally regarded as safe, supported by reports of minimal complication rates.35 In male-to-female surgery, breast augmentation is a common choice, with up to 67% of transwomen opting for it due to limited natural growth.<sup>38</sup> Complication rates and reoperation rates for these procedures are comparable between cisgender and transgender patients, yielding about 1.6% and 1.8%, respectively.<sup>39</sup> For penile-inversion vaginoplasty, the gold standard for feminizing genital surgery, patient satisfaction can reach 80%, but complications such as rectoneovaginal fistulas and stenosis may still occur, affecting sexual function. 40,41 Overall, this study highlighted the need to enhance public awareness about the safety and outcome profile following GAS, advocating for plastic surgery organizations to take a pivotal role in public education initiatives.

A key component of incorporating patient-centered care in surgical practices, especially for transgender patients, is the utilization of patient-reported outcome measures. 42,43 These measures offer a platform for patients to express their needs and experiences, thus facilitating a more tailored and effective surgical intervention. For example, the Gender Congruence and Life Satisfaction Scale and the Utrecht Gender Dysphoria Scale-Gender Spectrum are valuable tools for clinicians. They provide insights into the patient's perception of gender congruence and dysphoria, which are crucial for guiding clinical decisions and enhancing the overall satisfaction with GAS.44,45 The implementation of such patient-reported outcome measures can significantly improve surgical interactions by fostering a deeper understanding of patient needs and outcomes, thereby aligning surgical interventions more closely with patient expectations and enhancing the overall quality of transgender healthcare.

Our study is not without limitations. About 20% of participants identified as LGBTQIA+, potentially influencing their understanding of GAS more than non-LGBTQIA+ individuals. Although our initial analysis suggested comparable outcomes between LGBTQIA+ and non-LGBTQIA+ participants, we are currently

corroborating our findings in another study cohort (unpublished data). The use of an online survey platform could introduce selection bias, possibly excluding those without internet access and proficiency, but is generalizable. At the time of this study, Prolific Academic encompassed more than 120,000 participants that are active and vetted. The cross-sectional design offers only a snapshot of opinions at a specific time, lacking insight into evolving perspectives. In addition, self-reported data, primarily through the Likert scale, might not fully capture nuanced attitudes and may be susceptible to response bias. Although we are the first research group to use these items in this specific order, we conceptualized and revised the questionnaire in close collaboration with an experienced psychologist. Future studies should develop upon the findings in this study and capture perceptions over time, especially as new legislation is introduced. Other aspects of this survey that can be adapted are modifying the questionnaire to include specialties who work in collaboration with plastic and reconstructive surgery on GAS, such as otolaryngologists, urologists, and obstetricians and gynecologists.

# **CONCLUSIONS**

In conclusion, our study elucidated the public perceptions of GAS to understand the prevailing opinions and highlight areas of misconceptions within the US community. Although a substantial portion of respondents perceived public knowledge of GAS to be low, many believed that plastic surgeons primarily offer GAS. The study illuminated ambivalent attitudes toward education, accessibility, and insurance coverage of GAS, with a significant percentage of participants doubting that GAS positively affects mental health and well-being. Overall, this study underscores the need for continuous educational efforts and policy initiatives to improve public awareness, dispel misconceptions, and foster a broader understanding of the importance of GAS for TGDIs.

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# **DISCLOSURES**

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