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Ethical Dilemmas in Plastic Surgery: Insights From a Survey Study in Saudi Arabia

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Background: Plastic surgery often presents complex ethical dilemmas involving patient autonomy, informed consent, and resource allocation. This study aimed to explore these challenges and their impact on surgeons' decision-making processes.
Methods: A survey study was conducted among plastic surgeons in Saudi Arabia between May and June 2024. An online-validated questionnaire was distributed to consultants, residents, and registrars. The survey covered demographic information and ethical dilemma scenarios. Data were analyzed using SPSS, with chi-square tests used to assess associations.
Results: Among the 75 participants, 53.3% were consultants, 82.7% were male, and the majority (38.7%) were between 30 and 39 years of age. Most surgeons (41.3%) reported rarely encountering ethical dilemmas, with managing patient expectations being the most common issue, cited by 48.0% of respondents. Professional guidelines influenced decision-making for 56.0% of the participants. Consultants and residents had differing experiences; consultants were more concerned about advertising practices (75.0% compared with 12.5%) and complications (70.0% compared with 30.0%), whereas residents focused primarily on resource allocation (100.0% versus none of the consultants).
Conclusions: Plastic surgeons in Saudi Arabia face various ethical challenges, with differences noted between consultants and residents. The findings highlight the importance of addressing these challenges to enhance decision-making and patient care.
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INTRODUCTION

Plastic surgery, a field that encompasses both aesthetic and reconstructive procedures, frequently presents complex ethical dilemmas for practitioners. An ethical dilemma arises when a surgeon faces conflicting ethical principles. These situations are particularly frustrating for physicians because they often involve making difficult decisions where there is no clear right or wrong answer. This ambiguity can lead to moral distress, a psychological state where physicians feel conflicted and burdened by the responsibility of making a choice that may have significant consequences, despite there being no definitive solution.[1] These ethical challenges stem from issues such as patient autonomy, informed consent, resource allocation, and balancing aesthetic desires with reconstructive needs.

For example, autonomy—the right of patients to make informed, independent choices—can be compromised when cosmetic surgery marketing targets vulnerable individuals, potentially undermining the ability to give fully informed consent. Similarly, nonmaleficence, the principle of "first, do no harm," is often tested in elective procedures, as surgeons must weigh the risks of surgery on healthy individuals. Patient autonomy demands that surgeons respect patients' rights to make their own choices and govern themselves without interference while ensuring they are fully informed about the risks and outcomes of procedures. Furthermore, informed consent in plastic surgery encompasses not only medical aspects but also the psychological and social factors that influence patients' decisions. Another example is the principle of

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beneficence, which requires acting in the best interest of the patient, which can be complex in plastic surgery where elective procedures may carry risks that must be balanced against the patient's desired outcomes.[2–4]

Balancing reconstructive procedures, which aim to restore or repair abnormal body structures (such as an amputated nose), with cosmetic procedures, which focus on altering or enhancing body parts generally considered to be within the normal range of appearance, raises resource allocation issues. Prioritizing cosmetic procedures, which are often elective, over reconstructive procedures can result in an inequitable distribution of medical resources, including time, money, and expertise.[5,6]

Previous studies have highlighted various ethical challenges faced by healthcare professionals across different regions and specialties.[7,8] For instance, a cross-sectional study conducted among physicians in several hospitals in Saudi Arabia identified top ethical issues as disagreements between patients or their families and healthcare professionals regarding treatment decisions, treating patients with impaired decision-making abilities, and conflicts with administrative policies.[9]

Incorporating these insights, our study aimed to further explore the ethical dilemmas specific to plastic surgery, assessing how these challenges influence surgeons' decision-making processes and patient care. By understanding these factors, we can promote best practices and enhance ethical standards in the field.

Takeaways

Question: What are the primary ethical challenges faced by plastic surgeons in Saudi Arabia, and how do these challenges affect their decision-making processes?

Findings: Plastic surgeons in Saudi Arabia primarily face ethical challenges in managing patient expectations (48.0%). Decision-making is mostly influenced by professional guidelines (56.0%). Consultants and residents differ in their ethical concerns, with consultants focusing on advertising and complications, whereas residents prioritize resource allocation.

Meaning: The study reveals diverse ethical challenges in Saudi Arabian plastic surgery, emphasizing the need for tailored ethical training and guideline adherence to improve patient care and decision-making across all practice levels.

METHODS AND MATERIALS

Ethical Approval

Ethical approval for this study was obtained from the Unit of Biomedical Ethics at the College of Medicine, Al-Imam Muhammad Ibn Saud Islamic University, Saudi Arabia (reference number 657/2024). The study adhered strictly to the principles outlined in the Declaration of Helsinki. Written informed consent was obtained from all participating physicians before their involvement in the study. This study was conducted and reported in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology guidelines.[10]

Study Design, Setting, and Population

This survey study was conducted between May and June 2024, targeting plastic surgeons practicing in Saudi Arabia. The study population encompassed three categories of professionals: consultants accredited by the Saudi Commission for Health Specialties, plastic surgery residents, and registrars. This approach aimed to capture a comprehensive range of perspectives across different levels of experience and expertise within the field.

Sampling and Data Collection

A stratified random sampling technique was used to ensure adequate representation across various demographic and professional strata, including geographic regions, years of experience, and subspecialties within plastic surgery. The survey was distributed to 113 eligible plastic surgeons practicing in Saudi Arabia. It was administered online via Google Forms (Google LLC, Mountain View, CA), and the link was sent through direct messages on WhatsApp, ensuring a secure and user-friendly platform for participants.

Sample Size Calculation

The initial sample size for this study was calculated to be 60 participants based on a confidence level of 95%, a margin of error of 5%, and an estimated population of plastic surgeons in Saudi Arabia. However, we decided to increase the target sample size to 75 participants. This decision was made to enhance the study's statistical power and ensure a more comprehensive representation of the plastic surgery community in Saudi Arabia, where the number of practicing plastic surgeons is significant. Of 113 eligible plastic surgeons invited to participate in the study, 75 completed the survey, resulting in a response rate of 66.26%. This calculation considered the expected response rate and the need for a representative sample across different demographic and professional strata.

Questionnaire Development

The survey instrument consisted of 18 questions divided into 2 main sections. The first section of the survey collected demographic data, including age, sex, current position, subspecialty within plastic surgery, location of board certification, years of experience, primary practice setting, and region. In this study, "subspecialty" specifically refers to consultant positions or physicians who have completed their board certifications. This ensures that responses related to subspecialty practice reflect the experiences and expertise of fully qualified surgeons rather than residents or registrars still in training. The second section included multiple-choice and Likert-scale questions covering topics such as the frequency and types of ethical dilemmas encountered, decision-making strategies, and factors influencing choices. The questionnaire was developed in English based on a comprehensive review of previous publications on this topic.[10–13] The development process involved multiple stages to ensure

clarity, relevance, and validity. Initially, the survey was pilot-tested with a group of 15 students and interns from the plastic surgery interest club. These individuals were selected because they had been exposed to ethical issues in theoretical and early practical training, allowing them to provide valuable feedback on the clarity and structure of the questions. Their input helped refine the wording and layout of the questionnaire to ensure it was understandable and logically organized. Following this initial phase, the revised questionnaire was reviewed by an expert panel of senior plastic surgeons, including 3 consultants with extensive experience in managing ethical dilemmas in clinical practice. These senior surgeons provided critical feedback on the content, ensuring that the scenarios and questions accurately reflected real-world ethical challenges faced in the field of plastic surgery. Their insights were instrumental in refining the questionnaire to ensure it captured relevant and meaningful data for the study's objectives. This multi-step development process, involving both early-stage medical trainees for clarity and senior specialists for content validation, ensured that the final survey instrument was both accessible to respondents and robust in capturing the ethical dimensions relevant to plastic surgery practice.

Statistical Analysis

The statistical analysis was done by SPSS (IBM version 26). The categorical variables were presented as frequencies and percentages. The chi-square test was used to show the association between perspectives of plastic surgery consultants and residents regarding ethical dilemmas and decision-making to present frequencies, percentages, and *P* values. A *P* value of less than 0.05 is an indication of statistical significance.

RESULTS

Demographic Questions

The study included 75 plastic surgeons, with a response rate of 66.26%. The majority (38.7%) were between 30 and 39 years of age, and 82.7% were male individuals. In terms of current positions, 53.3% were plastic surgery consultants. Subspecialty choices varied, with the highest proportion, 49.3%, specializing in aesthetic surgery. Regarding board certification, 68.0% of participants were certified by the Saudi Board. Experience levels ranged, with 33.3% having less than five years of experience. Most surgeons (60.0%) worked in governmental hospitals, and the majority (81.3%) practiced in the central region. Table 1 provides an overview of the demographics of the included participants.

Table 1. Demographic Questions

Parameter	Category	N	%
Age, y	<30	18	24.00
	30–39	29	38.70
	40–49	15	20.00
	50–59	7	9.30
	60 or above	6	8.00
Sex	Female	13	17.30
	Male	62	82.70
Current position	Plastic surgery resident	31	41.30
	Plastic surgery consultant	40	53.30
	Plastic surgery registrar	4	5.30
Subspecialty within plastic surgery	None	22	29.30
	Aesthetic surgery	37	49.30
	Breast reconstruction	23	30.70
	Reconstructive surgery	29	38.70
	Hand surgery	26	34.70
	Craniofacial surgery	16	21.30
	Microsurgery	26	34.70
	Burn surgery	18	24.00
	Pediatric	2	2.70
	Brachial plexus and peripheral nerve surgery	1	1.30
Location of board certification	Saudi Board	51	68.00
	Other	24	32.00
Years of experience in plastic surgery	Less than 5	25	33.30
	5–10	19	25.30
	11–20	24	32.00
	More than 20	7	9.30
Primary practice setting	Academic hospital	12	16.00
	Private hospital	15	20.00
	Governmental hospital	45	60.00
	Other	3	4.00
Region	Central region	61	81.30
	Western region	10	13.30
	Eastern region	3	4.00
	Southern region	1	1.30

Ethical Dilemmas and Decision-making

Regarding the frequency of ethical dilemmas, 41.3% of plastic surgeons reported occasionally encountering them in their practice (Fig. 1). The most frequently cited dilemma was managing patient expectations and demands, reported by 48.0% of respondents. Consulting colleagues or ethical committees was common, with 32.0% doing so often. Confidence in navigating ethical dilemmas was high, with 37.3% feeling very confident. Professional guidelines and codes of ethics influenced decision-making for 56.0% of participants. Ethical dilemmas were frequently discussed with patients during the informed consent process, with 50.7% always doing so. Training in handling ethical dilemmas was considered adequate to some extent by 42.7%. Requests for ethically questionable procedures were rare, with 53.3% reporting such requests infrequently. A strong understanding of medical ethics was deemed extremely important by 64.0% of respondents, and 28.0% always referred to professional ethical guidelines (Table 2).

Association Between Perspectives of Plastic Surgery Consultants and Residents Regarding Ethical Dilemmas and Decision-making

The study examined the ethical dilemmas faced by plastic surgery residents and consultants, revealing that managing patient expectations and demands was the most common challenge, reported by 41.7% of residents and 52.8% of consultants. Balancing aesthetic and

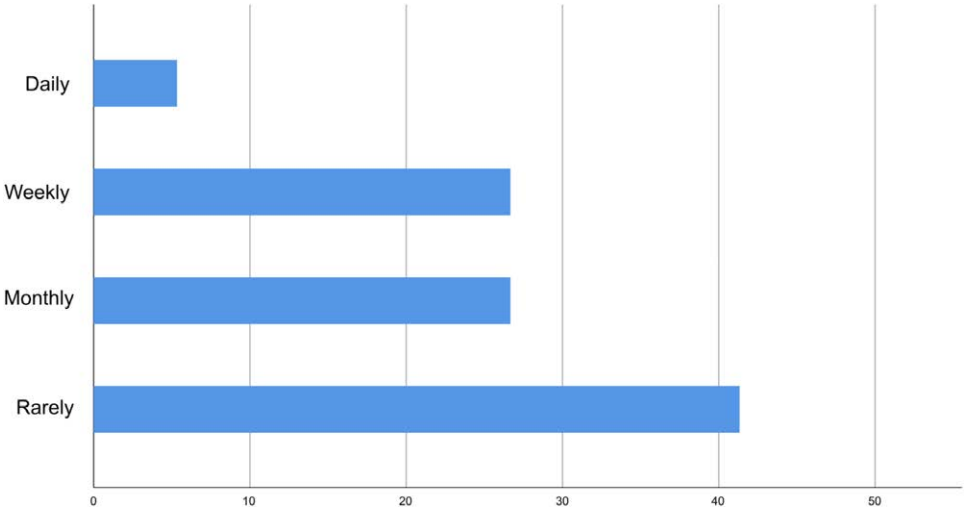

Fig. 1. Bar chart showing the period of encountering ethical dilemmas in plastic surgery practice.

reconstructive procedures was noted by 54.5% of residents and 36.4% of consultants, whereas patient autonomy and informed consent were equally reported by both groups at 50.0%. Advertising and marketing practices were a concern for 75.0% of consultants compared with just 12.5% of residents. Dealing with complications and adverse events was more common among consultants (70.0%) than residents (30.0%). Resource allocation and prioritization were exclusively noted by residents (100.0%). In terms of decision-making during ethical dilemmas, both groups primarily relied on professional guidelines and codes of ethics, with 42.9% of residents and 54.8% of consultants doing so. Personal moral values and beliefs influenced 42.9% of residents and 50.0% of consultants, whereas legal considerations impacted 28.6% of residents and 57.1% of consultants. Institutional policies and practices were more influential for residents (60.0%) compared with consultants (40.0%) (Table 3).

DISCUSSION

Our study has shed light on the current ethical dilemmas faced by plastic surgeons and the factors influencing their decision-making. The most frequent ethical concerns were managing patient expectations and demands, dealing with complications and adverse events, and balancing aesthetic and reconstructive procedures. The primary factor influencing decision-making among physicians was adherence to professional guidelines and codes of ethics.

It is essential to clarify the distinction between ethical dilemmas and clinical complications. Although complications such as bleeding, infection, and facial nerve injury are significant in plastic surgery, they may arise from ethical dilemmas involving conflicts between patient autonomy and medical necessity. For instance, a surgeon might face an ethical dilemma when a patient requests a cosmetic procedure that could worsen an existing medical condition, potentially leading to complications. This tension between respecting patient autonomy and ensuring safety underscores the interconnectedness of ethical decision-making and clinical outcomes.

In our findings, we observed differences in how consultants and residents prioritize these challenges. Consultants, drawing from their extensive experience, often focus on managing complications and ensuring patient safety, as reflected in their concerns about adverse events. Meanwhile, both consultants and residents encounter similar ethical challenges related to informed consent and managing patient expectations, emphasizing that these issues are pervasive across experience levels.

Several studies highlighted that plastic surgeons frequently encounter unrealistic expectations from patients, especially regarding cosmetic procedures.[14–16] Factors contributing to this include the influence of social media, which, despite educating patients and providing better procedural understanding, often used aggressive marketing and edited before-and-after photographs, leading to distorted expectations.[17,18] Additionally, some patients seeking cosmetic surgery may have underlying psychological issues, such as, dysmorphophobia, narcissism, or, particularly, body dysmorphic disorder, which is especially significant due to its high prevalence in plastic surgery patients, estimated at approximately 18.6%.[19–21] These conditions often result in unrealistic or unachievable surgical goals, and such patients are unlikely to be satisfied regardless of the surgical outcome.[22] Therefore, selecting the right patients is crucial for postoperative satisfaction. However, physicians sometimes might face challenges in selecting the right patients. In such cases, it is important to take additional measures such as providing thorough explanations to ensure patients understand realistic outcomes and referring patients to another hospital or specialist if disagreements persist.

This challenge also extends to noncosmetic procedures. For example, patients undergoing breast reconstruction after mastectomy often have unrealistic

Table 2. Ethical Dilemmas and Decision-making

Parameter	Category	N	%
Which of the following ethical dilemmas do you encounter most frequently?	Managing patient expectations and demands	36	48.00
	Balancing aesthetic and reconstructive procedures	11	14.70
	Patient autonomy and informed consent	6	8.00
	Advertising and marketing practices	8	10.70
	Dealing with complications and adverse events	10	13.30
	Resource allocation and prioritization	3	4.00
	All the above	1	1.30
When faced with an ethical dilemma, how often do you consult with colleagues or ethical committees?	Never	2	2.70
	Rarely	11	14.70
	Sometimes	17	22.70
	Often	24	32.00
	Always	21	28.00
How confident are you in your ability to navigate ethical dilemmas in your practice?	Very unconfident	0	0.00
	Somewhat unconfident	0	0.00
	Neutral	21	28.00
	Somewhat confident	26	34.70
	Very confident	28	37.30
Which of the following factors most strongly influence your decision-making when faced with an ethical dilemma?	Personal moral values and beliefs	14	18.70
	Professional guidelines and codes of ethics	42	56.00
	Legal considerations and potential liabilities	14	18.70
	Institutional policies and practices	5	6.70
How often do you discuss ethical dilemmas with your patients as part of the informed consent process?	Never	0	0.00
	Rarely	7	9.30
	Sometimes	9	12.00
	Often	21	28.00
	Always	38	50.70
Do you believe that your training adequately prepared you to handle ethical dilemmas in plastic surgery?	No, not at all	3	4.00
	No, not really	7	9.30
	Neutral	13	17.30
	Yes, to some extent	32	42.70
	Yes, very much so	20	26.70
In your experience, how often do patients request procedures that you consider ethically questionable?	Never	1	1.30
	Rarely	40	53.30
	Occasionally	22	29.30
	Frequently	10	13.30
	Very frequently	2	2.70
In your opinion, how important is it for plastic surgeons to have a strong understanding of medical ethics?	Moderately important	2	2.70
	Very important	25	33.30
	Extremely important	48	64.00
How often do you refer to professional ethical guidelines when making decisions in your practice?	Never	6	8.00
	Rarely	14	18.70
	Sometimes	20	26.70
	Often	14	18.70
	Always	21	28.00

expectations, not anticipating changes such as loss of sensation, limited movement, or differences in the appearance of the reconstructed breast.[23,24] Thus, healthcare providers must address patient expectations and educate them about realistic outcomes to improve postoperative satisfaction.

In our study, a significant proportion of respondents were involved in the aesthetic field. However, it is important to recognize the potential gap in experience among residents and registrars. Research indicates that many plastic surgery residency programs do not provide extensive training in aesthetic surgery. For instance, a large percentage of senior plastic surgery residents have reported that an aesthetic surgery clinic was not part of their training, and most did not have a dedicated aesthetic surgery rotation during their residency. Additionally, many residents feel that the quantity of aesthetic cases during training is insufficient.[25] This limited exposure to aesthetic procedures during residency may influence how residents and registrars approach ethical dilemmas in this field. Given these training gaps, many senior residents have expressed a strong need for additional training in aesthetic surgery, underscoring the importance of more hands-on experience and dedicated rotations.[26] These findings highlight the necessity of improving aesthetic surgery education within residency programs to better equip future plastic surgeons for the ethical challenges they may face.

Table 3. Association Between Perspectives of Plastic Surgery Consultants and Residents Regarding Ethical Dilemmas and Decision-making

Parameter	Category	Plastic Surgery Resident		Plastic Surgery Consultant		*P*
		N	%	N	%	
Which of the following ethical dilemmas do you encounter most frequently?	Managing patient expectations and demands	15	41.70	19	52.80	0.497
	Balancing aesthetic and reconstructive procedures	6	54.50	4	36.40	
	Patient autonomy and informed consent	3	50.00	3	50.00	
	Advertising and marketing practices	1	12.50	6	75.00	
	Dealing with complications and adverse events	3	30.00	7	70.00	
	Resource allocation and prioritization	3	100.00	0	0.00	
	All the above	0	0.00	1	100.00	
Which of the following factors most strongly influence your decision-making when faced with an ethical dilemma?	Personal moral values and beliefs	6	42.90	7	50.00	0.623
	Professional guidelines and codes of ethics	18	42.90	23	54.80	
	Legal considerations and potential liabilities	4	28.60	8	57.10	
	Institutional policies and practices	3	60.00	2	40.00	

Another significant ethical dilemma plastic surgeons face involves managing complications and adverse events. Each cosmetic medical or surgical procedure carries specific liability issues. These include poor patient rapport, insufficient informed consent, failure to obtain medical history, performing unrequested procedures, and violating the standard of care.[27] Additionally, the prevalence of nonphysician practice in cosmetic surgery without proper training or supervision poses a risk to public safety and increases the risk of patient adverse events.[28] Addressing these issues requires strict adherence to ethical standards, thorough patient communication, and diligent postprocedure care to ensure patient safety and trust.

Our study highlights that most physicians adhere to professional guidelines and codes of ethics, significantly influencing their decision-making. Establishing comprehensive ethical codes that align with evolving legal standards can provide clear guidance to the medical profession when navigating complex medical decisions.[29]

Our study has several limitations. First, the sample size of 75 participants, whereas calculated to ensure sufficient statistical power, may not fully capture the distribution of the plastic surgery community in Saudi Arabia. The representation of consultants and residents/registrars may not reflect the actual demographics of the field. Despite our efforts to use a stratified random sampling method, the final sample may have been influenced by the availability and willingness of participants during the data collection period. Another limitation is the short data collection period, which may have restricted the diversity of responses. Furthermore, ethical dilemmas are influenced by cultural background, sex, and religion, which vary across regions. Because our study was conducted solely in Saudi Arabia, the findings may be limited by the specific cultural and social context of this country.

CONCLUSIONS

In conclusion, addressing ethical dilemmas in plastic surgery involves managing patient expectations, navigating procedural complexities, and adhering to ethical standards. Continued ethical training and adherence to guidelines are essential. Future studies should aim for a balanced sample size and longer data collection, and should incorporate diverse cultural perspectives by including populations from multiple countries. Utilizing social networking and internet systems can facilitate the collection and analysis of broader data, thereby enhancing understanding and outcomes. Finally, future studies should aim for a more balanced representation to enhance the generalizability of the results.

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DISCLOSURE

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REFERENCES

1 Torjuul K, Nordam A, Sørlie V. Action ethical dilemmas in surgery: an interview study of practicing surgeons. *BMC Med Ethics.* 2005;6:7.
2 Sterodimas A, Radwanski HN, Pitanguy I. Ethical issues in plastic and reconstructive surgery. *Aesthetic Plast Surg.* 2011;35:262–267.
3 Sullivan DA. *Cosmetic Surgery: The Cutting Edge of Commercial Medicine in America.* Rutgers University Press; 2001.

4 Chung KC, Pushman AG, Bellfi LT. A systematic review of ethical principles in the plastic surgery literature. *Plast Reconstr Surg.* 2009;124:1711–1718.

5 Brock DW, Wikler D. Ethical issues in resource allocation, research, and new product development. In: Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, et al, eds. *Disease Control Priorities in Developing Countries.* The International Bank for Reconstruction and Development/The World Bank Oxford University Press; 2006.

6 Goldwyn RM. Unproven treatment: whose benefit, whose responsibility? *Plast Reconstr Surg.* 1988;81:946–947.

7 Gracia D. The intellectual basis of bioethics in Southern European countries. *Bioethics.* 1993;7:97–107.

8 Ong W, Yee C, Lee A. Ethical dilemmas in the care of cancer patients near the end of life. *Singapore Med J.* 2012;53:11–16.

9 Mansour Almoallem A, Abdulaziz Almudayfir M, Al-Jahdail YH, et al. Top ethical issues concerning healthcare providers working in Saudi Arabia. *J Epidemiol Global Health.* 2020;10:143–152.

10 Von Elm E, Altman DG, Egger M, et al; STROBE Initiative. The strengthening the reporting of observational studies in epidemiology (STROBE) statement: guidelines for reporting observational studies. *Lancet (London, England).* 2007;370:1453–1457.

11 Lee Z-H, Reavey PL, Rodriguez ED, et al. Ethical issues in aesthetic and reconstructive surgical innovation: perspectives of plastic surgeons. *Plast Reconstr Surg.* 2019;143:346–351.

12 Schoenbrunner AR, McIntyre JK, Nthumba P, et al. Ethical dilemmas in global plastic surgery: divergent perspectives of local and visiting surgeons. *Plast Reconstr Surg.* 2022;149:789e–799e.

13 Bennett KG, Ingraham JM, Schneider LF, et al. The teaching of ethics and professionalism in plastic surgery residency: a cross-sectional survey. *Ann Plast Surg.* 2017;78:552–556.

14 Zbar RI, Taylor LD, Canady JW. Ethical issues for the plastic surgeon in a tumultuous health care system: dissecting the anatomy of a decision. *Plast Reconstr Surg.* 2008;122:1245–1252.

15 Crockett RJ, Pruzinsky T, Persing JA. The influence of plastic surgery "reality TV" on cosmetic surgery patient expectations and decision making. *Plast Reconstr Surg.* 2007;120:316–324.

16 Oregi P, Cavale N, Khatib M, et al. The ethics and responsibilities of social media usage by plastic surgeons: a literature review. *Aesthetic Plast Surg.* 2024;48:530–542.

17 Naraghi M, Atari M. Development and validation of the expectations of aesthetic rhinoplasty scale. *Arch Plast Surg.* 2016;43:365–370.

18 González Mejías S. *Is" Snapchat Dysmorphia" a Real Issue?* Cureus, Inc; 2018.

19 Kaleeny JD, Janis JE. Body dysmorphic disorder in aesthetic and reconstructive plastic surgery—a systematic review and meta-analysis. *Healthcare.* 2024;12:1333.

20 Ricketson G. Basis for cosmetic surgery. *South Med J.* 1962;55:269–273.

21 Harth W, Hermes B. Psychosomatic disturbances and cosmetic surgery. *J Dtsch Dermatol Ges.* 2007;5:736–743.

22 Silkiss RZ. Eight-fold path to happiness for the cosmetic surgery patient. *Ophthalmic Plast Reconstr Surg.* 2006;22:157–160.

23. Snell L, McCarthy C, Klassen A, et al. Clarifying the expectations of patients undergoing implant breast reconstruction: a qualitative study. *Plast Reconstr Surg.* 2010;126:1825–1830.

24. Tedesco D, Makarem G, Mayo J, et al. Satisfaction with expectations-based education in women undergoing breast reconstruction. *Plast Surg Nurs.* 2021;41:211–224.

25. Momeni A, Goerke SM, Bannasch H, et al. The quality of aesthetic surgery training in plastic surgery residency: a survey among residents in Germany. *Ann Plast Surg.* 2013;70:704–708.

26. Linder SA, Mele JA, Capozzi A. Teaching aesthetic surgery at the resident level. *Aesthetic Plast Surg.* 1996;20:351–354.

27. Shiffman MA. Medical liability issues in cosmetic and plastic surgery. *Med Law.* 2005;24:211–232.

28. Brody HJ, Geronemus RG, Farris PK. Beauty versus medicine: the nonphysician practice of dermatologic surgery. *Dermatol Surg.* 2003;29:319–324.

29. Patrinely JR, Jr, Drolet BC, Perdikis G, et al. Ethics education in plastic surgery training programs. *Plast Reconstr Surg.* 2019;144:532e–533e.