Although the practice of medicine is built on a foundation of ethics, science, and common sense, the increasing complexity of medical interventions, social interactions, and societal norms of behavior challenges the ethical practice of aesthetic surgeons. We report a survey of the opinions, practices, and attitudes of experienced and novice facial plastic surgeons. The survey consisted of 15 clinical vignettes addressing ethical quandaries in aesthetic rhinoplasty. The vignettes are based on the experience and observations of the senior author (P.A.A.) over nearly 30 years of practice and teaching. Fellowship directors and facial plastic surgery fellows of the American Academy of Facial Plastic and Reconstructive Surgery were surveyed anonymously. Five of the 15 vignettes demonstrated significant differences between the responses of the fellowship directors and the fellows. No single vignette had a unanimous consensus in either group. Aesthetic rhinoplasty surgeons encounter ethical issues that should be reflected on by both experienced and inexperienced facial plastic surgeons, preferably before being faced with them in practice. We present a practical approach to ethical issues in clinical practice. Our survey can also be used as a stimulus for further discussion and teaching.


It appears to me that in Ethics, as in all other philosophical studies, the difficulties and disagreements, of which history is full, are mainly due to a very simple cause: namely to the attempt to answer questions, without first discovering precisely what question it is which you desire to answer.

George Edward Moore, Principia Ethica [1903].

Perhaps the question we hope to answer herein is implied in the works of Hippocrates, who is credited with the simple general principle of always acting in the patient's best interests and, first and foremost, doing no harm. In rhinoplasty, the best course of action is often not immediately obvious, and some cases are fraught with ethical quandaries and conflicts. Considered by many to be the father of modern aesthetic surgery, Jacques Joseph, MD, recognized early in his career the psychological, psychosocial, and ethical aspects that were inherent in aesthetic rhinoplasty.1-3 Since his time, the ethical challenges faced by the modern rhinoplasty surgeon have become more complex. This study examines the decision-making of established and novice facial plastic surgeons by posing 15 clinical scenarios related to aesthetic rhinoplasty.

Ethical analysis in clinical medicine is commonly based on the 4 principles described by Beauchamp and Childress4: respect for autonomy, beneficence, nonmaleficence, and justice. We used these principles as the conceptual framework for our study. Autonomy is the principle that
respects the right of patients to make informed decisions about their own bodies. Beneficence obliges us to act in the patient’s best interest. Nonmaleficence, based on the Hippocratic Oath, requires physicians to minimize harm. Justice requires fairness in the treatment of patients and colleagues. Although these principles are not mutually exclusive, they provide a framework with which to investigate and explore ethics with respect to rhinoplasty.

Discussion of ethical challenges and principles in plastic surgery literature is underrepresented, as Chung et al reported in a recent systematic review; they found only 110 articles that clearly focused on ethical principles in a pool of over 100,000 articles. It is generally agreed that aesthetic plastic surgery is requested not only to satisfy the desires of the patient who seeks such interventions but, more importantly, to address the patient’s psychological and psychosocial needs, perceptions, and expectations. The aesthetic plastic surgeon will perform the requested interventions to enhance the patient’s life, not “save” it. On the one hand, enhancement of the quality of life of the patient seeking aesthetic plastic surgery is an acceptable indication and is typically the ethical justification given by most aesthetic plastic surgeons. On the other hand, Atiyeh et al argued that “a closer look from an ethical viewpoint makes clear that the doctor who offers aesthetic interventions faces many serious ethical problems having to do with the identity of the surgeon as a healer.” The premise that aesthetic surgery is primarily a business, guided by a market ethic aimed at material gain and profit and arguably not an integral part of the health care system, undergirds this argument. Modern aesthetic rhinoplasty could be perceived as a tool to fulfill wishes instead of relieving suffering or treating illness. However, most rhinoplasty surgeons feel that aesthetic rhinoplasty is a powerful means by which the patient can be anatomically, emotionally, and psychologically healed.

The rhinoplasty literature addresses patient selection, avoiding potential problems, and dealing with dissatisfied patients. Underlying ethical considerations in rhinoplasty are rarely explored. The rhinoplasty surgeon, in general, wishes to recommend treatments that are most appropriate for each specific patient to achieve his or her own unique goals with maximum benefit and least risk. Some of the pitfalls described in the general plastic surgery literature are pertinent to rhinoplasty surgery. Ethical breaches include failure to properly obtain informed consent; failure to perform a standard medical history and physical examination, including appropriate investigation of medical and psychological comorbidities; breaching the standard of care in the technical aspects of the surgical procedure; failure to properly address a complication in a timely manner; misrepresentation as an expert witness; and false or unsubstantiated advertisements.

We surveyed the views of rhinoplasty teachers and trainees on representative ethical issues. Based on our empirical data, we have formulated a practical approach that may be helpful to inexperienced and experienced surgeons. The survey can also be used as a stimulus for further discussion and teaching of ethics in rhinoplasty surgery.

### Table 1. Demographic information asked of each survey participant.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you a fellowship director or a fellow?</td>
<td>Yes, no, or neither.</td>
</tr>
<tr>
<td>2. How many rhinoplasties (approximately) have you performed independently to date?</td>
<td>10, 50, 100, or more.</td>
</tr>
<tr>
<td>3. Do you perform mostly open approach, endonasal approach, or a mixture of both?</td>
<td>Open, endonasal, or mixture.</td>
</tr>
<tr>
<td>4. How many years, if any, have you been in practice?</td>
<td>1-5, 6-10, 11-20, or more.</td>
</tr>
<tr>
<td>5. Approximately what percentage of your rhinoplasties are primary vs revisions?</td>
<td>25%, 50%, 75%, 100%</td>
</tr>
<tr>
<td>6. Are you primarily affiliated with a university, private sector, or both?</td>
<td>University, private sector, both, or neither.</td>
</tr>
</tbody>
</table>

### METHODS

Approval to conduct this study (No. 10-0707-AE) was obtained from the University Health Network Research Ethics Board at the University of Toronto (Toronto, Ontario, Canada).

Fifteen theoretical vignettes, each based on ethical challenges encountered in the senior author’s (P.A.A.) practice, were posed to a total of 103 facial plastic surgeons and facial plastic surgeons-in-training, hereinafter referred to as fellows. The survey website www.askitonline.com was used to conduct the survey. The facial plastic surgeons polled were all fellowship directors in the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS) and board-certified by the American Board of Facial Plastic and Reconstructive Surgery, and thus considered mentors and leaders in the specialty. These fellowship directors are expected to set an example in accordance with the AAFPRS Code of Ethics. AAFPRS fellows would have all signed the “fellowship agreement,” also binding them to the same guidelines and ethical principles. To minimize bias, the answers were entered anonymously, except for general demographic information (Figure 1).

Prior to conducting the survey, the questions asked and the choice of answers were reviewed with a statistician and ethicist and modified accordingly. The individual questions and answer choices are presented in Figure 2.

### RESULTS

The response rate to the survey overall was 54% (56 of 103). Fifty-four percent of the fellowship directors (30 of 56) and 55% of the fellows in the AAFPRS (26 of 47) agreed to participate in the study. The survey data were collected from February through April 2011.

### DEMOGRAPHICS

Most fellows had performed 10 to 50 rhinoplasties, whereas most fellowship directors had performed more than 100 (Figure 3). As expected, fellows had fewer years of experience than fellowship directors, and a larger percentage of the fellows’ practice involved primary rather than revision rhinoplasties compared with the practices of the fellowship directors (Figure 4 and Figure 5). Both groups reported their most common approach to be “open,” followed by “both,” and, least frequently, “endonasal” (Figure 6). Over 85% of participants in this study were affiliated with a university, whereas less than 20% in either group worked exclusively in private practice (Figure 7).
1. You are a facial plastic surgeon who has been practicing in a large city for 5 years. On an internet website, you browse one of your colleagues’ sites and discover that, of the rhinoplasty and rhinoplasty pictures posted on your colleague’s site, many of these photographs are in fact of private patients from the practice of your colleague’s fellowship director and not patients on whom he personally performed rhinoplasty. Your best course of action would be to:

A. Do nothing.
B. Call your colleague and ask him to remove his page immediately.
C. Report this finding directly to your colleague’s fellowship director.
D. Report this finding directly to the state licensing board.

2. A 25-year-old woman presents for rhinoplasty consultation. Since age 13 years, she cannot stand to be photographed because she feels that her nose is not harmonious with her face. She feels that people are constantly staring at her nose. She cannot specifically tell you what it is about her nose that bothers her other than it is “big and ugly.” On facial and nasal analysis, you note she has appropriate nasal length, projection, and rotation. She has normal nasal tip architecture and dynamics. She has slight weakness in her nasal dorsum, but this measure at rest 1 mm from being completely linear in profile view. On further questioning, she tells you she wants a nose “big and ugly.” On facial and nasal analysis, you note she has appropriate nasal length, she cannot stand to be photographed because she feels that her nose is not harmonious with her face. She feels that people are constantly staring at her nose. She cannot specifically tell you what it is about her nose that bothers her other than it is “big and ugly.” On facial and nasal analysis, you note she has appropriate nasal length, projection, and rotation. She has normal nasal tip architecture and dynamics. She has slight weakness in her nasal dorsum, but this measure at rest 1 mm from being completely linear in profile view. On further questioning, she tells you she wants a nose “big and ugly.”

A. Politely refuse to perform rhinoplasty because you do not feel that you can achieve a result that would satisfy her.
B. Advise her that she should not have rhinoplasty now or ever and discuss candidly with her your concerns about her stated aesthetic goals.
C. Perform rhinoplasty with planned reduction of her dorsum and further nasal tip refinement but emphasize that her appearance may be unnatural and appear “operated.”
D. Offer to mask her dorsal hump with injectable fillers as an initial measure.

3. A 25-year-old man is referred to you for rhinoplasty by a physician who is a personal friend of yours and has a long history of good referrals to you. In the consultation, you discover that 4 years prior the patient attempted suicide 3 times, twice by self-mutilation and once by attempted overdose. He was diagnosed as having schizoaffective disorder at age 18 years and has been completely stable on a strict regimen of medications. He has not had any psychological disturbances since taking medication. His psychiatrist has given him “clearance” to proceed with elective cosmetic surgery. On examination of his nose, he points out that he simply wants his large dorsal hump taken down and his twisted nose straightened to fit better with the rest of his face. On further questioning, he does not have any of the traits of body dysmorphic disorder or unrealistic expectations. Your best course of action would be to:

A. Politely refuse to perform rhinoplasty and advise him that it would not be in his best interests.
B. Perform rhinoplasty without contacting his psychiatrist.
C. Proceed with rhinoplasty once the psychiatrist confirms his mental stability and compliance.
D. Perform paper or digital “morsels” of expected outcomes and give these to the patient and ask him to return for another visit to discuss further whether he would still like to proceed.

4. A 34-year-old malpractice attorney returns 1 year after having had her aesthetic rhinoplasty performed. She had a prominent nasal dorsum reduced, osteotomies, spreader grafts, and minimal nasal tip work. During her postoperative course she has been content with her appearance except for a 1-mm convexity in her nasal dorsum that is definitely present but objectively well within the normal range. She had been advised that healing can take 1 year and now demands revision surgery to further take the “hump” down. She has short nasal bones, thin skin, and very friable cartilage in the middle vault that required additional grafting. On discussing the risks of revision surgery she comments, “Well, after paying the amount I did for this nose job, I certainly hope you can get it right this time—and I certainly hope you don’t expect me to pay for this.”

A. Politely refuse to perform revision rhinoplasty as you feel she has an acceptable result.
B. Extensively discuss and document the risks of revision surgery, then proceed with revision surgery with further dorsal reduction, covering all costs, including professional, facility, and anesthesia fees.
C. Extensively discuss and document the risks of revision surgery, then proceed with revision surgery with further dorsal reduction, charging only your surgeon’s fee but not covering the facility and anesthesia fees.
D. Extensively discuss and document the risks of revision surgery, then proceed with revision surgery with further dorsal reduction, waiving only your surgeon’s fee but charging for the facility and anesthesia fees.

5. A 38-year-old business executive presents for consultation regarding revision rhinoplasty. He had primary rhinoplasty performed by a colleague, whom you know professionally. He is extremely unhappy with his appearance, has new functional complaints, and has not gone back to his initial surgeon. The patient claims that “he messed up my nose—why should I give him a second chance?” On examination he has an overrotated “pinched” nasal tip, a scooped-out nasal dorsum with open roof deformity with bilateral external nasal valve collapse. He does not bring old operative notes or clinic notes with him and specifically asks you not to speak to his initial surgeon or to contact him for his medical records because he does not want to know he is seeking a revision. He also defers when asked to obtain these medical records because he does not want to make the initial surgeon “suspicious” that he is underscoring a revision procedure. Your best course of action would be to:

A. Politely refuse to perform revision rhinoplasty and advise him to reconsider and return to his initial surgeon.
B. Advise the patient that you would like to see him for a second visit prior to possibly proceeding with revision surgery, then contact your colleague to discuss the patient with him to determine if the patient is a reasonable candidate, and proceed if indicated or turn him down if not.
C. Proceed with revision rhinoplasty without contacting your colleague or obtaining prior medical records.
D. Agree that the patient has had an undesirable outcome. Offer to proceed with revision rhinoplasty only on the provision that the patient acquire previous medical and surgical records from your colleague’s office.

6. You are a facial plastic surgeon who has been in practice for 10 years. Your older brother calls you and asks if you would perform a rhinoplasty on his wife, whom you know well and see socially frequently. His wife has mentioned to you several times that her nose has bothered her since her teens and she would like someday to get it corrected. He mentions that if you won’t do her rhinoplasty gratis or for a discount, she can’t afford to go elsewhere to have it done. Your best course of action would be to:

A. Politely refuse to perform her rhinoplasty or see her in consultation.
B. Agree to see her in consultation, and if she is a good candidate, agree to perform the rhinoplasty at a mutually agreeable professional (surgeon’s) fee, but ask they cover the anesthesia and surgery suite fee.
C. Agree to see her in consultation, and if she is a good candidate, agree to perform the rhinoplasty only if they are willing to pay your usual fee.
D. Agree to see her in consultation, and if a good candidate, suggest that she have her rhinoplasty done by another surgeon.

7. A 27-year-old medical student seeks you in consultation for rhinoplasty. He has had 3 prior operations, the last one being 2 years ago by a reputable surgeon, and he brings all prior medical records and operative reports, and initially seems reasonable. He admits to thinking about his appearance several hours some days, and he also admits that he feels that his nose is a major factor in his low self-confidence. You are the fourth surgeon he has seen in the past month. He asks you simply to perform a nasal tip-plasty to his liking. He indicates he wants just slight rotation without fullness at the nasolabial angle, no supratip break, and no further dorsal work performed. He cites literature that demonstrates that rhinoplasty improves quality of life and is convinced that with 1 more operation he will have achieved his goals. He states that he is quite confident in you, because you seem to be the only surgeon who has truly understood his concerns. He also comments on how nicely your office staff has treated him, especially compared with how poorly he was treated at the other physicians’ offices. Your best course of action would be to:

A. Politely refuse to perform revision rhinoplasty and advise he not seek surgery.
B. Thoroughly explain and document the risks and limitations of possibly not being able to achieve a “perfect” result, and proceed with revision rhinoplasty if he understands and acknowledges.
C. Suggest in a collaborative manner that he undergo psychiatric evaluation and, if cleared, perform revision rhinoplasty in accordance with his goals.
D. Call his first surgeon to discuss his case and his care and make a decision to proceed based on this conversation.

8. You are performing open structure septorhinoplasty on a 15-year-old girl for functional and aesthetic reasons. She is under general anesthesia and is intubated with an endotracheal tube. Even while you are opening the nose, you notice that she is bleeding significantly more than average. After performing osteotomies, you encounter a significant nosebleed with active hemorrhage coming out of her nose and mouth. You communicate with your anesthesiologist, who informs you that her blood pressure is beginning to drop, and she is becoming tachycardic, consistent with a significant amount of blood loss. You pack the nose rigorously with gauze and ask that blood be brought into the operating room and that a phone call be made to her parents, as you prepare to try to stop the nosebleed. The circulating nurse in the operating room reminds you that the patient and her family are Jehovah’s Witnesses and specifically denied the use of blood products under any circumstances. After explaining the situation to the parents, they state that they would like you to respect their beliefs and not use blood products, even if it could lead to a stroke or death. The anesthesiologist asks you what you want to do. Your best course of action would be to:

A. Type and cross units of blood and use them if the patient becomes unstable and it is deemed medically necessary by you and the anesthesiologist, and do not tell the parents.
B. Type and cross units of blood and use them if the patient becomes unstable and it is deemed medically necessary by you and the anesthesiologist, and tell the parents that you did it to save her life.
C. Call the hospital attorney or ethics committee and ask for advice.
D. Respect the wishes of the patient’s parents (her legal guardians), abort the septorhinoplasty, and try your best to stop the nosebleed.

9. A 22-year-old cross-dressing man seeks rhinoplasty consultation. He states that, as a young boy, he knew he was a girl and that living as a boy was not satisfying to him. He knew he was seeking a revision. He also defers when asked to obtain these medical records because he does not want to make the initial surgeon “suspicious” that he is underscoring a revision procedure. Your best course of action would be to:

A. Politely refuse to perform revision rhinoplasty and advise him to reconsider and return to his initial surgeon.
B. Advise the patient that you would like to see him for a second visit prior to possibly proceeding with revision surgery, then contact your colleague to discuss the patient with him to determine if the patient is a reasonable candidate, and proceed if indicated or turn him down if not.
C. Proceed with revision rhinoplasty without contacting your colleague or obtaining prior medical records.
D. Agree that the patient has had an undesirable outcome. Offer to proceed with revision rhinoplasty only on the provision that the patient acquire previous medical and surgical records from your colleague’s office.

Figure 2. Ethical vignettes asked of each survey participant.
like to proceed. He also mentions that he will likely be seeking transgender surgery in the near future and that this would be an excellent first step. He has a large dorsal hump, long nasal bones, and bifid nasal tip. His skin and soft-tissue envelope are thin, and surgically he would be a good candidate for feminization of his nose. Your best course of action would be to:

A. Politely refuse to perform rhinoplasty.
B. Offer to perform with rhinoplasty, with the caveat that you will address some of his concerns and desires, but you will not feminize the nose.
C. Offer to proceed with rhinoplasty, attempting to achieve his desired results.
D. Ask that he undergo formal psychological or psychiatric evaluation prior to proceeding with any surgery—proceed only if it is “cleared” from one of these health care professionals.

10. A 45-year-old man comes to your office for rhinoplasty consultation. You perform your surgical procedures at a private surgery center and routinely utilize the services of a board-certified anesthesiologist. The patient states he has always been unhappy with his nose, especially his platil and bulbous nasal tip. In addition to his prominent dorsal convexity. On analyzing his medical history and physical examination, you learn that he has hepatitis C virus, human immunodeficiency virus, diabetes, and hypertension, all of which are well controlled with medication. He tells you that he is aware that he is at increased risk for poor healing and complications, but this is something he has wanted since he was a teenager, and is willing to proceed and accept these risks. Your best course of action would be to:

A. Politely refuse to perform rhinoplasty.
B. Advise him that he should probably not have elective cosmetic surgery performed owing to his medical comorbidities.
C. Ask that he obtain “clearance” from his internal medicine and infectious disease physicians, then proceed with rhinoplasty.
D. Recommend that he have his rhinoplasty performed at a tertiary care center where they would better be able to handle any untoward medical or anesthetic events.

11. During a primary septorhinoplasty, you inadvertently disrupt the keystone region in the subdorsal radial septum, which subsequently causes complete dislocation from the nasal bones. You spend approximately 30 minutes resecuring the cartilage to the nasal bones with the use of grafts, suture, and Kirschner wires. At the conclusion of the case, the middle vault feels stable and secure. Postoperatively, your best course of action would be to:

A. Tell the family immediately of the unexpected intraoperative encounter but assure them that this should not have a negative impact on the final result.
B. Tell the patient at the postoperative visit of the intraoperative encounter but assure the patient that you do not anticipate that this will have a negative impact on their final result.
C. Do not discuss this intraoperative encounter with the patient or family.
D. Tell the patient of the intraoperative encounter only if a functional or aesthetic problem presents.

12. Your colleague, who is a facial plastic surgeon, informs you that your patient, a 34-year-old attorney who had primary rhinoplasty performed by you presents for a follow-up visit complaining of left greater than right nasal airway obstruction, which she says she did not have before her operation. You do not feel that her aesthetic results are outside of the range of normal; however, you do note that there is left-sided internal valve collapse, which is improved with Cottle maneuver. You offer her revision rhinoplasty. However, she refuses and informs you that she has found another rhinoplasty surgeon who she feels more comfortable with is willing to perform her revision surgery. She asks you for a full refund of her procedure since it has led to an unsatisfactory aesthetic result and has created breathing problems. She also tells you that unless a full refund (including professional, facility, and anesthesia fees) is granted, she will move forward with a lawsuit against you. Your best course of action would be to:

A. Advise her that you are unable to refund her fee and recommend it is best she have any further surgery with her new rhinoplasty surgeon.
B. Advise her that you are unable to refund her fee but would be pleased to surgically address her valve collapse for no fee.
C. Offer a partial refund of her total bill, including a full refund of your professional fees, but state that you cannot recover anesthesia or facility fees.
D. Offer a full refund as she has requested and pay out of pocket for anesthesia or facility fees.

13. A 34-year-old attorney who had primary rhinoplasty performed by you presents for her 1-year follow-up. She has been unhappy throughout her postoperative course. Aesthetically, she complains that her nose appears too rotated, that it is underprojected, and that she can feel the irregularities at the osteotomy sites. Functionally, she complains of left greater than right nasal airway obstruction, which she says she did not have before her operation. You do not feel that her aesthetic results are outside of the range of normal; however, you do note that there is left-sided internal valve collapse, which is improved with Cottle maneuver. You offer her revision rhinoplasty. However, she refuses and informs you that she has found another rhinoplasty surgeon who she feels more comfortable with is willing to perform her revision surgery. She asks you for a full refund of her procedure since it has led to an unsatisfactory aesthetic result and has created breathing problems. She also tells you that unless a full refund (including professional, facility, and anesthesia fees) is granted, she will move forward with a lawsuit against you. Your best course of action would be to:

A. Advise her that you are unable to refund her fee and recommend it is best she have any further surgery with her new rhinoplasty surgeon.
B. Advise her that you are unable to refund her fee but would be pleased to surgically address her valve collapse for no fee.
C. Offer a partial refund of her total bill, including a full refund of your professional fees, but state that you cannot recover anesthesia or facility fees.
D. Offer a full refund as she has requested and pay out of pocket for anesthesia or facility fees.

14. An 18-year-old Middle Eastern woman presents to your office for rhinoplasty consultation. She has always been unhappy with her nose and simply wants her dorsal convexity reduced, deprojection, and some nasal tip refinement. She is mature and seems to have reasonable expectations and motivations. She admits that her parents are adamantly against her undergoing a nasal operation and have told her that they would not be supportive of such a decision in any form. She lives at home with her parents. Your patient has the financial means to proceed with surgery and has informed you that her boyfriend has offered to help her with her recovery. Your best course of action would be to:

A. Politely refuse to perform rhinoplasty.
B. Proceed with rhinoplasty and do not concern yourself with communicating with her parents.
C. Ask that she return with at least 1 of her parents so that you might discuss her rhinoplasty goals. Only proceed if her parents come to agree with her decision to have rhinoplasty.
D. Ask that she return with her boyfriend to assure that he is indeed willing to help her through recovery. Proceed if you are comfortable with her goals and his social support.

15. You are in your second year of practice as a facial plastic surgeon at an academic institution. You have an excellent candidate for septorhinoplasty who has both aesthetic and functional concerns. Your patient does not have the financial means to pay for the aesthetic component of the rhinoplasty and has asked you to perform this under the functional septorhinoplasty billing code. You are aware that this would require you to be vague in your operative report and not specifically describe the dorsal hump reduction or describe it in a circumlocution fashion. Your best course of action would be:

A. Politely refuse to perform rhinoplasty.
B. Advise the patient that she may or may not receive insurance coverage for the full procedure—perform the septorhinoplasty if she is willing to accept this risk.
C. Perform the septorhinoplasty, attempting to achieve both the functional and aesthetic goals of your patient, but describe the operation in a manner that would be covered by insurance.
D. Advise the patient that she can perform only a functional septorhinoplasty and not perform the dorsal convexity reduction or osteotomies. You leave the decision to her as to whether she wishes to proceed on this basis.

Figure 2. Ethical vignettes asked of each survey participant. (continued)

Figure 3. Number of rhinoplasties performed.

Figure 4. Surgeons’ years in practice.
RESPONSES TO VIGNETTES

Fisher exact test was used to compare the responses of fellows and fellowship directors. Of the 15 vignettes, responses differed significantly between fellows and fellowship directors for 2 of 15 of cases (13%), including cases 4 and 14 (Figure 8). Differences were not statistically significant for another 3 of 15 (20%) of cases, including cases 1, 2, and 7 (Figure 9). The differences in responses between fellowship directors and fellows are as follows.

<table>
<thead>
<tr>
<th>Case No.</th>
<th>P Value Comparing by Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.09</td>
</tr>
<tr>
<td>2</td>
<td>.06</td>
</tr>
<tr>
<td>3</td>
<td>.66</td>
</tr>
<tr>
<td>4</td>
<td>.05</td>
</tr>
<tr>
<td>5</td>
<td>.28</td>
</tr>
<tr>
<td>6</td>
<td>.30</td>
</tr>
<tr>
<td>7</td>
<td>.13</td>
</tr>
<tr>
<td>8</td>
<td>.74</td>
</tr>
<tr>
<td>9</td>
<td>.51</td>
</tr>
<tr>
<td>10</td>
<td>.57</td>
</tr>
<tr>
<td>11</td>
<td>.65</td>
</tr>
<tr>
<td>12</td>
<td>.71</td>
</tr>
<tr>
<td>13</td>
<td>.25</td>
</tr>
<tr>
<td>14</td>
<td>.03</td>
</tr>
<tr>
<td>15</td>
<td>.17</td>
</tr>
</tbody>
</table>

Responses to other cases are reported in the eFigure (http://www.archfacial.com).

COMMENT

Ethical issues in rhinoplasty have been raised since the inception of the procedure. From the days of Tagliacozzi in the 16th century, there was documentation of negative connotations associated with changing the shape of one's nose, as it was felt to interfere with the will of God. The morality of aesthetic plastic surgery was affirmed by Pope Pius XII, who decreed “esthetic surgery, far from opposing the will of God in restoring perfection to the greatest work of His visible creation, seems rather to conform better with it, and renders clear testimony to its wisdom and goodness.” The current opinion of most facial plastic surgeons can perhaps best be represented by the dissertation of Jack Anderson, MD, which addresses the “morality” of aesthetic rhinoplasty. He concludes that aesthetic rhinoplasty, in the context of appropriate motives, conforms to “... administering to the whole individual” and “is not only ethical and permissible but also a necessity in some cases.”

Rhinoplasty has become an accepted tool to improve both the function and the appearance of the organ that is central to facial aesthetics and to the upper airway. Modern aesthetic rhinoplasty nearly always addresses the functional as well as the aesthetic aspects of the nasal airway.
(e.g., placing a spreader graft to improve symmetry and increase the cross-sectional area of the internal nasal valve, or avoiding overaggressive resection of the cephalic margin of the lower lateral cartilages).

**ETHICAL DILEMMAS**

The survey conducted in this project focused on ethical dilemmas that are commonly faced by rhinoplasty surgeons, including the following: questionable patient motivations, psychological comorbidities, dissatisfied patients, litigious patients, relationships with surgical colleagues, intraoperative and postoperative decision-making, patients with questionable social support, patients’ alternative lifestyles, and surgeon honesty with insurance companies.

An overall response rate of 54% suggests a fairly strong interest in the subject matter even though this was an uncompensated survey. More than half of fellowship directors (54%) and fellows (55%) completed the survey. Analyzing the demographic information, it was interesting to note that 10% of AAFPRS fellows had performed 50 to 100 rhinoplasties, which likely reflects significant experience during residency or spending some years in practice prior to entering the fellowship (Figure 3). When

---

Figure 8. Cases with statistically significant different responses between fellowship directors and fellows. A, Case 4, a patient with good result demanding revision ($P = .05$); B, case 14, transcultural 18-year-old seeking rhinoplasty with parents opposing ($P = .03$). See Figure 2 for a description of the cases.

Figure 9. Cases without statistically significant different responses between fellowship directors and fellows. A, Case 1, colleague with website photographs of another surgeon’s work ($P = .09$); B, case 2, a patient requesting an unnatural result ($P = .16$); C, Case 7, a patient who has undergone multiple operations seeking perfection ($P = .13$). See Figure 2 for a description of the cases.
assessing primary vs revision rhinoplasty, most fellowship directors and fellows responded that 51% to 75% of their cases were primary (Figure 5). Fellows were more likely to use an open approach, whereas fellowship directors were split between predominantly “open” or “both” (Figure 5).

Of the 15 vignettes, statistically significant different responses between fellowship directors and fellows were observed in 2 of 15 of cases (13%) (Figure 8). In 1 of the vignettes, a disgruntled malpractice attorney returns 1 year after rhinoplasty with what is described as an acceptable result. Although most (>70% of fellows and 65% of fellowship directors) elected to proceed with revision surgery, waiving surgeon’s fees only (while making the patient pay for anesthesia and facility fees), 30% of fellowship directors refused to perform any more surgery, and only 15% of fellows chose this option. The fact that fellowship directors were twice as likely to refuse performing additional surgery may reflect how experience teaches surgeons when not to operate in situations in which the probability of a favorable outcome is low.

In the second vignette that had significantly different responses (P = .05) between fellowship directors and fellows, an 18-year-old woman who lives at home requests aesthetic rhinoplasty but lacks the support of her parents, who are adamantly opposed to her undergoing the operation. She goes to the consultation visit with her boyfriend, and she has the financial means to pay for the operation. Forty-five percent of fellowship directors answered that they would speak to the parents of the patient and proceed only with their consent, whereas 15% of fellows would have done so. Sixty-five percent of fellows would proceed with rhinoplasty if the patient’s boyfriend seemed supportive and agreed to help with postoperative recovery, whereas only 37% of fellowship directors answered this way. Not a single fellow answered that they would refuse to do the operation altogether, whereas 10% of fellowship directors selected this theoretical action (Figure 8). Although 18 years is the legal age of consent for surgery in most jurisdictions, the varied responses in this vignette suggest that fellowship directors are more aware of the negative consequences that an unsupportive environment can have, especially pertaining to rhinoplasty. It is well documented that positive and negative feedback from family members can influence patients’ overall satisfaction after aesthetic rhinoplasty. Negative feelings are easily transferred from the family to the surgeon.

Three cases did not display statistical significance between the answer choices given by fellowship directors and fellows (Figure 9). In response to a colleague posting on a website patient photographs that were of private patients of his fellowship director, most fellows (70%) would call the individual directly and advise him to take the pictures down, whereas only 35% of fellowship directors would do so. Sixty percent of fellowship directors would report this finding directly to the facial plastic surgeon’s fellowship director, whereas only 23% of fellows would do this. Interestingly, 5% of fellowship directors and fellows would “do nothing,” and 5% of fellowship directors would report this finding directly to the state licensing board. This may reflect the fellowship directors’ greater comfort with contacting their own peers in this situation.

In the second case with quite different responses, a patient presents with a normal-appearing nose but desires aesthetic rhinoplasty with a scooped-out dorsum and a pinched nasal tip. One hundred percent of fellowship directors would refuse to perform the operation; 45% simply would refuse the patient, and 55% would take the extra step of advising the patient that she should never have a rhinoplasty and discussing their aesthetic and anatomic concerns with her. Ninety percent of fellows would refuse to perform the operation, whereas 5% would perform the operation as long as she acknowledged that she would have an “operated” appearance and possibly poor function, whereas the other 5% would try to achieve her aesthetic goals with injectable fillers. Although most responders in both groups would refuse to perform surgery, it is interesting to note that a small percentage of fellows would try to offer this patient surgery—this likely represents optimistic expectations of satisfying this patient while avoiding functional complications.

In the third case that had varied responses, a medical student who sought revision aesthetic rhinoplasty had undergone 3 prior rhinoplasties and exhibited elements of body dysmorphic disorder and a personality disorder. Most fellows (55%) would offer surgery if this theoretical patient had undergone psychiatric evaluation and clearance, whereas only 35% of fellowship directors would do so. Most fellowship directors (55%) would refuse to operate on this patient and advise that he not seek additional surgery, whereas only 35% of fellows would perform this action. This case possibly best represents the evolution of practice for rhinoplasty surgeons, who often serve as the psychologists themselves. Although a psychologist or psychiatrist is an important colleague to involve in the care of patients with psychiatric illnesses, it is more important that the surgeon feel comfortable with the patient’s psychiatric condition, expectations, and motivations. It is better to have an unhappy patient who does not undergo an operation than a dissatisfied patient who has had an operation.

Consensus between fellowship directors and fellows was noted in most of the vignettes. Both cohorts would request to see prior operative records prior to embarking on revision surgery for a “botched” nose. Most responders (75% of fellows and 90% of fellowship directors) would offer to perform rhinoplasty on a sister-in-law, whereas only 5% of fellows and 10% of fellowship directors would refuse. Operating on family members is generally discouraged, except in an emergent or urgent situation. In some jurisdictions, it is grounds for a finding of professional misconduct if a complaint is ultimately filed by a dissatisfied family member.

In the case in which the underage patient is bleeding profusely and the parents have asked that she not be given a transfusion because they are Jehovah’s Witnesses, 42% of fellowship directors and 45% of fellows would respect the parents’ wishes and not transfuse, whereas 35% of fellowship directors and 25% of fellows would give her a transfusion in an effort to save the child’s life and prevent possible neurologic sequelae. Although it is more
ambiguous in the case of a mature adolescent, the courts are clear when it comes to children. The US Supreme Court has ruled that “Parents may be free to become martyrs themselves, but it does not follow (that) they are free . . . to make martyrs of their children.”14 When parents refuse blood on behalf of their children, based on religious beliefs, consideration should be given to these beliefs and treatment accommodated where possible. However, the child’s welfare is always paramount, and blood considered to be essential can be given, although the surgeon assumes a risk of being sued for nonconsented treatment.15

In response to the vignette in which a cross-dressing man desires a feminine nose, 90% of fellowship directors would offer surgery with 55% seeking psychiatric clearance. Seventy-five percent of fellows would offer surgery; 50% would request psychiatric clearance. Approximately 10% of both cohorts would refuse to perform surgery.

When dealing with a patient with multiple medical comorbidities, 75% of fellows would perform the rhinoplasty at an outpatient surgery center. Only 60% of fellowship directors would do this—25% of fellowship directors would recommend the patient go to a tertiary care center, whereas less than 10% of fellows made this recommendation.

When dealing with an intraoperative complication of unlikely long-term negative consequences, such as dislocating the septum at the keystone area, only 45% of fellowship directors and fellows would tell the family of this occurrence immediately after the surgery. Forty percent of fellows and 28% of fellowship directors would tell the patient routinely at the first postoperative visit of this occurrence, whereas 15% of fellowship directors and 8% of fellows would discuss this problem only if there were a functional or aesthetic concern after the surgery. Less than 5% of both groups of surgeons would never discuss this complication with the patient or the family.

Most fellowship directors and fellows would offer a reduced fee when operating on a colleague.

When dealing with a functional complication (eg, internal valve collapse) as a result of rhinoplasty in one’s own patient, 45% of fellowship directors and 70% of fellows would not offer any refund but would perform a revision gratis to address the problem. Despite threats of litigation, 35% of fellowship directors and 20% of fellows would recommend that the patient see the other surgeon she had chosen to have her revision surgery without offering a refund.

Finally, when dealing with insurance companies, 20% of fellows would perform a septrhinoplasty with both cosmetic and functional components and dictate the case such that it was covered by insurance, whereas only 6% of fellowship directors would do so. Fifty-five percent of fellowship directors and 40% of fellows would proceed with the functional component alone since the patient is unwilling to pay for the cosmetic component. Eighteen percent of fellowship directors and only 4% of fellows would refuse to perform the case altogether. The 20% rate of fellows who would perform the operation and dictate an ambiguous operative report is disconcerting. When 169 internists were surveyed regarding deception of third-party payers, only 2.5% were willing to deceive the insurance companies with regard to cosmetic rhinoplasty.16

**RECOMMENDATIONS**

Most of the rhinoplasty surgeons responding to our survey are in accord with the management of these ethical problems despite their different levels of experience. The divergence of opinion on some of the questions suggests the need for guidance for younger rhinoplasty surgeons and a reference standard for the specialty.

The ethical framework of 4 principles1 was applied to surgical complications in an article by Adedeji et al.17 These authors include “undesirable outcomes” as a complication, a category very relevant to rhinoplasty surgery. The principles can serve as heuristics or general rules when constructing a personal code of conduct for rhinoplasty surgeons, but the principles do not provide a specific pathway to right action. In his excellent text *Doing Right: A Practical Guide to Ethics for Medical Trainees and Physicians*, which is commonly given to many first-year trainees in medical school, Hébert18 proposed an ethics decision-making procedure to assist physicians. Although this will be useful to most physicians, it lacks the specificity and complexity required by rhinoplasty surgeons. To provide a more specific algorithm for use in rhinoplasty surgery, we have adapted his approach. Herein, we propose a classification of ethical issues (Table) and a template for ethical decision-making (*Figure 10*) related to rhinoplasty.

Although every patient and situation is unique, these

### Table. Classification of Ethical Issues in Rhinoplasty

<table>
<thead>
<tr>
<th>Principle</th>
<th>Ethical Issues in Rhinoplasty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for autonomy</td>
<td>Informed consent for surgery, Digital photographs for documentation, Realistic and achievable goals communicated with patient and family, Confidentiality, Respecting patient’s requests, Adequate time during consultation to communicate expected outcomes, length of recovery, possible complications</td>
</tr>
<tr>
<td>Beneficence</td>
<td>Surgical competence in achieving desired goals, Judicious use of new techniques instead of time-tested methods, Understanding patient’s motivations (psychological, emotional, physical), Possessing tools necessary to perform the operation safely and optimally, Consultation with others as needed</td>
</tr>
<tr>
<td>Nonmaleficence</td>
<td>Surgical competence in achieving desired goals, Intraoperative decision making, Recognition of one’s own limits, Disclosure of surgical errors immediately, Referral to other surgeons as needed, Doing what is needed, but no more</td>
</tr>
<tr>
<td>Justice</td>
<td>Honest dictates reflecting work actually done, Avoidance of deceiving insurance companies, Avoidance of instigating or validating discontent for another surgeon in an already dissatisfied patient, Knowledge of professional behavior regulations</td>
</tr>
</tbody>
</table>

*Adapted from Adedeji et al.*17
frameworks may facilitate logical and thoughtful decision making for rhinoplasty surgeons faced with ethical dilemmas. We look forward to comments about their usefulness.

Ethical issues will continue to evolve as the complexity of rhinoplasty increases with advances in technology and bioengineering capabilities. In addition, the sophistication of the rhinoplasty consumer is exponentially increasing, as evidenced by patients bringing in their own digitally morphed images. Patients today have increasingly higher expectations for their outcomes. Surgeons will continue to develop their own ethical codes of conduct throughout their career. Personal codes of conduct can differ, modified by personal values, virtues, beliefs, preferences, circumstances, and experience. A logical, consistent, and reasoned approach to the ethical dilemmas encountered in rhinoplasty patients can help conscientious surgeons proceed with confidence.

REFERENCES

11. The Rhinoplasty Surgeon's Template for Resolving Ethical Problems

The Rhinoplasty Surgeon's Template for Resolving Ethical Problems

- Case. What are the facts and circumstances pertinent to this patient?
- Dilemma. What is the precise ethical issue? Are the decisions being made in the patient's best interests?
- Alternatives. What are reasonable alternatives? Are there nonsurgical options? Is surgery the best option?
- Key considerations in applying the 4 principles:
  - Autonomy. What is the patient's wishes and values? Consider the patient's understanding and expectations of the procedure. Explore his or her goals, hopes, and fears. If the patient is incapable of communicating the specific goals, this may be a negative prognostic indicator.
  - Beneficence and Nonmaleficence. What can actually be done for your patient? Consider the patient's previous operations, skin thickness, bony and cartilaginous framework, static and dynamic nasal airway, and any nonsurgical alternatives to achieve the goals. Will quality of life be improved?
  - Justice. Is the patient being treated fairly? Would he or she truly benefit from a septrhinoplasty to address the airway (ie, significant caudal septal deviation) instead of a simple septrhinoplasty? If asked to consult on an unsatisfactory result, avoid instigating anger in the patient, who may need a corrective operation. Work within professional regulatory guidelines.
  - Should others be involved? Consider familial support since a dissatisfied family can transfer negative feelings postoperatively to the patient, who will inevitably transfer those negative feelings to the surgeon. Would the support of other medical or paramedical professionals be helpful?
- Propose a resolution. Although most people are “good” candidates for rhinoplasty, there are few “perfect” candidates. Weigh the options and decide whether to proceed and in what fashion. Is there a probable net benefit for the patient?
- Consider your choice critically. Consider opinions of peers, your conscience, and emotional reactions. Are all parties involved, including yourself, comfortable with this decision? If not, what are the alternatives? Consider consulting with colleagues, ethical specialists, administration, or attorneys.
- Do the right thing based on your knowledge, experience, and values.

Figure 10. The rhinoplasty surgeon’s template for resolving ethical problems. Do the right thing based on your knowledge, experience, and values. This template was adapted from Hébert.10

14. Proctor v Massachusetts 1944;211 US. 158, 170.