

# Ethical Issues in Plastic and Reconstructive Surgery

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**Abstract** Plastic, reconstructive, and cosmetic surgery refers to a variety of operations performed in order to repair or restore body parts to look normal or to enhance a certain structure or anatomy that is already normal. Several ethical considerations such as a patient's right for autonomy, informed consent, beneficence, and nonmaleficence need to be given careful consideration. The principal objective of the medical profession is to render services to humanity with full respect for human dignity. Plastic surgeons should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion. They require an extensive amount of education and training. The increases in demand for aesthetic plastic surgery and the advocacy of practice in the media have raised concerns about the circumstances under which cosmetic surgery is ethical and permissible. Innovative research, and new technologies derived from such research, almost always raises ethical and policy concerns. Medical ethics regulate what is, and what is not, correct in promoting plastic surgery to the public. It is essential to create an educated and informed public about the ethical issues in the plastic and reconstructive surgery field. Plastic surgeons need to carefully evaluate the degree of deformity, physical and emotional maturity, and desired outcome of patients who request plastic surgery procedures. Science is a powerful force for change in modern society and plastic surgeons have a responsibility to shepherd that change with thoughtful advocacy and careful ethical scrutiny of their own behavior.

**Keywords** Ethics · Plastic and reconstructive surgery · Patient autonomy · Training · Media

## Introduction

The Greek poet Pindar (474 BC) wrote about the mythical physician Asklepios, a competent physician who was induced by greed to perform a forbidden medical service, violated divine law, and paid the penalty. Medical ethics, then and now, is about the physician's attitude and dealings with the price of saving and healing life [1]. Over 2000 years ago the foundation of medical ethics was defined clearly and classically by Hippocrates: "A physician should be an upright man, instructed in the art of healing, modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." The oath prescribed certain behaviors to protect the professional and his/her patients. Reference to modern ethical behaviors against the standards of this past code of conduct can be made, but only if the reference is clearly set in a historical setting or as part of descriptive ethics where the ethos of past civilizations or the ethics pertaining to another country are considered [2]. By the nineteenth century, medical ethics emerged as a more self-conscious discourse. Thomas Percival wrote about "medical jurisprudence" and reportedly coined the phrase "medical ethics" [3]. Percival's guidelines have been criticized as being excessively protective of the home physician's reputation. In 1847, the American Medical Association adopted its first code of ethics, based in large part upon Percival's work [4]. In the 1960s and 1970s, thinkers such as Joseph Fletcher [5] built upon liberal theory and procedural justice, dramatically

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shifting the discourse of medical ethics, largely reconfigured into bioethics. In 1979, Beauchamp and Childress [1] published *Principles of Biomedical Ethics*, in which they presented four “principles” that have since been adopted as the ethical basis for contemporary medical practice. These principles include respect for autonomy, beneficence, nonmaleficance, and justice [6]. While these principles were developed to guide physicians treating those suffering ill health, they provide the ethical framework which underpins modern surgical practice.

### Patient Autonomy

The historical model for the physician–patient relationship involved patient dependence on the physician’s professional authority. Believing that the patient would benefit from the physician’s actions, a patient’s preferences were generally overridden or ignored; the concept of physician beneficence allowed this paternalistic model to thrive. During the second half of the twentieth century, the physician–patient relationship evolved toward shared decision-making. This model respects the patient as an autonomous agent with a right to hold views, to make choices, and to take actions based on personal values and beliefs. Patients have been increasingly entitled to weigh the benefits and risks of alternative treatments, including choosing no treatment, and to select the alternative that best promotes their own values. These principles certainly apply to plastic and reconstructive surgery [7]. Provided patients are given sufficient information on which to make an informed decision, patients’ wishes must be respected. Information must include the risks of surgery together with alternative options. The purpose of informed consent is to protect the patients’ right to autonomy and is a requirement for autonomy. Informed consent in ethics usually refers to the idea that a person must be fully informed about and understand the potential benefits and risks of their choice of treatment. An uninformed person is at risk of mistakenly making a choice not reflective of his or her values or wishes. Informed consent is the process by which a fully informed patient can participate in choices about his or her health care. It originates from the legal and ethical right the patient has to direct what happens to his or her body and from the ethical duty of the physician to involve the patient in the patient’s health care. The plastic surgeon should put the health and safety of the patient first in deciding whether to accommodate a patient’s request for a particular procedure. Ethics dictate that the surgeon would not perform any procedure without the written consent of the patient. Nor would the surgeon perform surgery on a minor without the consent of his or her legal guardian(s). The most important goal of informed consent is that patients have an opportunity to be informed participants in their health care decisions.

Informed consent must be obtained from the patient before any medical intervention. Well-informed patients will have fewer anxieties during surgery and better compliance with instructions. The success of informed consent is largely based on effective communication between doctor and patient and the ability of the patient to understand what is being communicated.

### Beneficence

This principle requires medical practitioners to act in a patient’s “best interests.” Undertaking surgery to improve a patient’s self-image and self-esteem is acceptable. However, defining patients’ best interests can be very difficult. Many people experience real pain, discomfort, social handicap, and suffering because they are self-conscious about their appearance. This group can benefit from aesthetic plastic surgery [8]. Beneficence means an ethical duty to maximize benefit. Plastic surgeons have a duty not only to avoid harm to the patient but also to weigh the risks of the surgery with the needs (or demands) of the patient and to offer a plan that will provide him or her with the maximum benefit. If benefit to the patient is not the ultimate outcome, then the principle of beneficence has been violated. It is sometimes challenging to apply this principle with respect to aesthetic plastic surgery. Measuring benefits like long-term outcomes and quality of life is difficult and few studies on the long-term positive effects of aesthetic plastic surgery exist [9].

### Nonmaleficance

This principle ensures that doctors never act against a patient’s best interests or in a way that may harm the patient. Plastic surgeons may decline to operate on a patient if they do not believe that surgery is in the patient’s best interests and may be reluctant to operate on those with unrealistic expectations, as the risks of surgery may outweigh any benefits. All such assessments need to be made on an individual basis. A plastic surgeon is sometimes described as an artist who works with flesh. Body image in our consuming societies has become more and more important, and its new modelizations magnified by the media, strike the plastic surgeon with ethics questions [10]. A good plastic surgeon walks a fine line between the ideal of “doing no harm” and giving the patient what he or she asks for.

### Justice

Justice in health care is usually defined as a form of fairness, or as Aristotle once said, “giving to each that which is

his due.” This implies the fair distribution of goods in society and requires that we look at the role of entitlement. The right to be treated equally, and in some cases equal access to treatment, can be found in many constitutions, but in actual practice, a number of different factors may influence actual access to treatment, e.g., age, place of residence, social status, ethnic background, culture, sexual preferences, disability, legal capacity, hospital budgets, insurance coverage, and prognosis. This principle requires doctors to ensure that medical care is available to all. Equitable access to health care is regarded as a basic human right [11].

### The Field of Plastic and Reconstructive Surgery

Plastic, reconstructive, and cosmetic surgery refers to a variety of operations performed in order to repair or restore body parts to look normal or to enhance a certain structure or anatomy that is already normal. These types of procedures are highly specialized [12]. Reconstructive surgery developed out of the need to treat the amputated nose of unfaithful wives and the wounded soldiers in wartime, approximately 600 BC. Currently, abnormal structures of the body that are corrected during reconstructive surgery may be the result of birth defects, developmental abnormalities, trauma or injury, infection, tumors, or disease. Every race, culture, and tribe has its own concept of beauty and of what it considers to be normal. The judgment of what is normal lies on a continuum and may be viewed differently not only by the individual but also by society. A cleft lip is certainly perceived as abnormal in appearance and corrective surgery will always be encouraged in such cases. On the other hand, a large nose may not be considered out of the norm, but for the individual it may be unacceptable enough to prompt him or her to undergo surgery. Adolescents experience much emotional turmoil as part of their psychosocial development. When teased about physical qualities that do not conform to the average, such as prominent ears, they may experience sufficient suffering to consider surgery as a solution. The motivation for cosmetic surgery is straightforward: to enhance beauty. Cosmetic surgery raises a considerable ethical problem: the balance of the risks and the benefits of operations without functional benefit [13]. Every analysis for potential surgery must weigh the following:

- (1) *Purpose for surgery* Is the proposed surgery realistic? Does the patient seem competent to make the decision to have surgery? Patients must undergo thorough preoperative evaluation and counseling. This may require expert psychological assessment. Surgeons need to explain the likely benefits of the surgery,

alternative nonsurgical options, and the risks of surgery and anesthesia. The degree of success depends not only on the surgeon’s skills but also the age, health, skin texture, bone structure, and the specific problems and expectations of the patient. In the final analysis, it would be unethical for any physician to guarantee the results of any treatment performed. The only guarantee that can be made is to do the best work possible for the patient.

- (2) *Degree of deformity* Is the deformity noticeable? Are the patient’s expectations for correction appropriate? Appearance and deformities are important to anyone who engages in social interaction. Distortions in body appearance can lower self-confidence and disrupt social acceptance. This can result in behavior difficulties, manifesting as aggression or withdrawal. Although improvement in appearance may be psychologically beneficial by increasing self-esteem and self-confidence, cosmetic surgery is not the cure-all for all problems. Surgeons must ensure that patients’ expectations are realistic. In particular, if one blames his or her appearance for lack of success or happiness in life, the patient’s expectations may be surgically unobtainable or too risky. A word of caution must be dedicated to a particular type of patient. The “dysmorphic” patient should be firmly guided away from surgery; he or she desires the correction of a minimal or nonexistent defect, placing all of life’s frustrations on this supposed deformity. It has been proven that cosmetic surgery in this population will only lead to an unsatisfactory result or the creation of a different defect [14].

### Training of the Plastic Surgeon

A plastic surgeon requires an extensive amount of education and training. Depending on the country, he needs to first complete his bachelor’s degree in college and his medical school degree. Then he needs to undergo a complete residency in general surgery, followed by specialty training—either as a residency or a postgraduate program—to obtain the necessary skills in plastic surgery [15]. Finally, the doctor must successfully pass exams to be board certified. He might even need more training to gain expertise in a subspecialty. In all, the training past high school can take up to 16 years. A plastic surgeon also has to possess certain individual skills. Competency in this specialty implies a special combination of solid basic knowledge, surgical judgment, technical expertise, ethics, and interpersonal skills in order to achieve satisfactory patient relationships and problem resolution [16, 17]. Unfortunately, in some countries that do not have laws

prohibiting doctors to practice plastic surgery, any person with a medical degree can label himself or herself as a plastic surgeon. Some of those physicians may not have the same strong foundation. Cosmetic procedures are sometimes learned through workshops, official-sounding “fellowships,” or videotapes.

### Marketing, Media, and Plastic Surgery

Unfortunately, cosmetic surgery is too often treated as a commodity. False and misleading advertisements flourish in the media and on the internet in the fight for a share of the market, and the patient’s welfare becomes a second priority as procedures are promoted in the name of scientific development [18, 19]. A physician’s clinical judgment and practice must not be affected by economic interest in, commitment to, or benefit from professionally related commercial enterprises or other actual or potential conflicts of interest. Disclosure to patients, the public, and colleagues of professionally related commercial interests and any other interests that may influence clinical decision-making is required. This disclaimer will allow the patient to assess whether there is any conflict of interest.

Cosmetic surgery has increased exponentially in the last decade; media coverage has matched this increase. Consumer pressure is responsible for the growth of both. To assist the public in obtaining medical services, plastic surgeons are permitted to make known their services through advertising. Advertising permits public dissemination of truthful information about medical services, while prohibiting false, fraudulent, deceptive or misleading communications, and restricting direct solicitation. Medical ethics regulate what is, and what is not, correct in promoting plastic surgery to the public [20, 21].

### Innovative Research and New Technologies in Plastic Surgery

Innovative research, and new technologies derived from such research, almost always raises ethical and policy concerns. Such efforts should be informed by the most current scientific evidence and should occur through a process that encourages broad involvement by all sectors of society. As in any medical or surgical specialty, plastic surgery procedures should be subjected to rigorous research protocols before they are used on patients. Any clinical research initiative in plastic surgery must adhere to the highest standards of research subject protection, safeguarding the health and welfare of the patients involved. Ethical committees exist to guide physicians who intend to research new procedures, technologies, or equipment.

The ethical and policy issues raised by stem cell research are unique and have received a significant amount of public attention and there is much to gain by open reflection on the implications of this sensitive area of research [22, 23]. Congressional hearings, public meetings by government agencies, and media coverage have pushed stem cell research issues and applications in the field of plastic and reconstructive surgery into the spotlight [24, 25].

### Discussion

Society anticipates that plastic surgeons will make ethical decisions that are solely in the best interest of their patients [26]. Multiple competing factors that commonly influence decision-making by plastic surgeons, on both conscious and subconscious levels, are identified. By exploring the ramifications of these factors, a more ethical outcome can be achieved. Some of these competing interests that are crucial moral factors and are central to ethical decision-making include personal finances, outside regulations, and professional duty. Plastic surgeons who are aware of the competing interests that influence their decision-making processes stand a greater chance of achieving ethical outcomes. Nevertheless, with the growing volume of nonreimbursed care and expectations of perfect outcomes, achieving uniformly ethical decisions without burdensome self-sacrifice is difficult at best. The issues of ethics become even more complex where the mental and emotional state of the patient is concerned, and there is a good deal of psychology involved. A surgeon needs to do a good deal of evaluative screening before agreeing to operate on a patient. The gray areas do not stop at a patient’s mental and emotional state. Beauty is subjective, and what is aesthetically pleasing to the surgeon may differ from what the patient imagines as an ideal result. Good communication is the key here. Ultimately, it is up to each plastic surgeon to call upon his or her experience, training, and judgment to make the decision of when to operate, when not to operate, and when to refer the patient to another medical professional such as a qualified psychiatrist. It follows therefore that ethics in plastic surgery require special principles and refinements, just as surgical refinements became necessary in the practice of this important specialty.

The principal objective of the medical profession is the restoration of health and preservation of life. Plastic surgeons should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion. Since aesthetic plastic surgery is purely elective and an admittedly lucrative specialty, it easily lends itself as a fertile field for exploitation and commercialism by unscrupulous and poorly trained would be “specialists.” In the National Health Service, finite resources limit the

availability of aesthetic plastic surgery to those who suffer significant psychological distress due to their appearance. In the independent health care sector, aesthetic plastic surgery has increased in popularity, reflecting increased consumer demand.

Two principles must distinguish the well-prepared and conscientious aesthetic plastic surgeon from the shortcut-trained operator. First, the former must receive thorough training in plastic reconstructive and aesthetic surgery [27]. Second, he must possess a firm and honest ethical background [2]. It is accepted that an aesthetic surgery operation that ends in obvious damage has every chance of leading the patient to regret having had the operation. It is possible to lessen this risk in a sensible way by a number of means such as improving initial training, continuous training and inspections, consensus conferences, progress in techniques, and the diffusion of knowledge (telemedicine, specialized medical television, the internet, responsibility of the reading committees of journals from the specialized press, ethical teaching [28–30]). The increase in demand for aesthetic surgery and the advocacy of practice in the media have raised concerns about the circumstances under which cosmetic surgery is ethical and permissible. Certification of plastic surgeons and a closer regulation of cosmetic surgery facilities will increase quality and protect patients.

The potential for the abuse of cosmetic surgery must also be considered. A patient desiring cosmetic surgery should not be assured of getting it on the strength of that desire alone. The surgeon should decline such a request if it is felt that the patient will not benefit from the surgery or is not mature enough to understand the ramifications of the procedure. Surgeons must be cognizant of their actions when conducting a cosmetic surgery procedure that may enforce a cultural norm. Cosmetic surgery should be respected and overuse discouraged. Charging fees that are exorbitant and wholly disproportionate to the services rendered is unethical. The reasonableness of fees depends upon the novelty and difficulty of the procedures involved, the skill required to provide proper care, the time and labor required, the fee charged for similar services by similarly situated peers, and whether the patient had agreed in advance to the fee. A surgeon shall not initiate contact with a prospective patient knowing that the physical, emotional, or mental state or degree of education of the person solicited is such that the person could not exercise reasonable judgment in employing a plastic surgeon.

## Conclusion

In the vastly more complex present and future, the plastic surgeon's obligations to the patient can no longer be a

single-minded, unequivocal commitment, but rather must reflect a balanced relationship. Shared decision-making requires participation of the patient in setting the goals and methods of care and, therefore, in formulating the alternatives to be considered. Plastic surgeons need to carefully evaluate the degree of deformity, physical and emotional maturity, and desired outcome of patients who request plastic surgery procedures. It is essential to create an educated and informed public about the ethical and policy issues raised by innovative procedures and their application in plastic and reconstructive surgery. Science is a powerful force for change in modern society and plastic surgeons have a responsibility to shepherd that change with thoughtful advocacy and careful ethical scrutiny of their own behavior.

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