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Richa Saxena

3rd Edition

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Online References
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Chapter 2

Ethics in Surgery

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INTRODUCTION

The code of ethics has been developed in nearly all civilizations, dating back since the origins of medicine. Virtually in each culture, oaths, prayers, and code of ethics have originated, which aim at binding the newly trained physicians to their profession by forming a sort of contract between the doctor and patients. These are based on the principles of moral conduct toward patients, colleagues, and society. These medical oaths existed in medical fraternities of ancient India, 7th century China, and early Hebrew society.[1-3] The newly trained medical doctors were supposed to swear these before starting their professional practice. The most durable medical oath of Western civilization is "the Hippocratic Oath", which graduating medical students swear to at most of the medical schools in the United States and rest of the world. Other oaths commonly sworn to by new physicians include the "Declaration of Geneva" (an updated form of the Hippocratic oath formulated by the World Medical Association, Ferney-Voltaire, France).[4] The origins of the Hippocratic Oath presently remain unclear, although most historians agree that the oath's name, "Hippocrates" was not based on the name of its author. Most historians think that the oath originated from a cult of Greek physicians, who were followers of Pythagoras.[5] Alternatively, many researchers also believe that "the Hippocratic Oath" was created by physician-priests of the cult of Asclepius in ancient Greece. The main ethical principles set forth by the Hippocratic Oath include beneficence, nonmaleficence, confidentiality, and prohibition of abortion, euthanasia and sexual relations with patients.[6]

In the early 19th century, some work in the area of medical ethics was done by Sir Thomas Percival.[7] The American Medical Association was formed in 1847, which led to the resurgence of interest in the area of medical ethics.[8] However, the surgeons were excluded from this code of ethics. According to this code, all physicians claiming to have special abilities were criticized and labeled as quacks. The American College of Surgeons (ACS), Chicago, Illinois, by Dr Miles F Porter, formed in 1913 had set some of the earliest ethics guidelines for the surgeons.[9,10] Some important milestones in professional oaths and codes are listed in **Table 2.1**.

The World Medical Association (WMA) made efforts toward the modernization of the Hippocratic Oath, following the conclusion of World War II.[11] This issue was raised during the trial of Nazi doctors, who had experimented with Jewish prisoners in concentration camps at the time of World War II. After the conviction of the Nazi physicians, the War Crimes Tribunal had put forth 10 principles relevant to human experimentation, known as the "Nuremberg Code".[12] The Nuremberg code

TABLE 2.1: Milestones in professional oaths and codes.

Ethical code	*Author*	*Date*
Hippocratic oath	Pythagoreans or asclepiads	4th century BC
Medical ethics	Sir Thomas Percival	1803
American Medical Association's Code of Medical Ethics	Drs John Bell and Isaac Hays	1847
American College of Surgeons Fellowship Pledge	Dr Miles F Porter	1913
Declaration of Geneva	World Medical Association	1947
Nuremberg code	War Crimes Tribunal	1947
Declaration of Helsinki	World Medical Association	1964
Belmont's Report	National Commission for the protection of human subjects in the biomedical and behavioral research and the United States Department of Health, Education and Welfare	1979
Royal Australasian College of Surgeons Code of Ethics[15]	Royal Australasian College of Surgeons	1993

included the concepts of informed consent, societal good, and volunteerism as the foundation for biomedical research. The Nuremberg code emphasizes the following principles:[13] the voluntary consent of the human subject is absolutely essential before involving a person in biomedical research; the person involved should have legal capacity to give consent and should be given free power of making appropriate choice. There should not be any element of force, fraud, deceit, duress, or other concealed form of constraint or coercion involved in taking consent.[14] In order to enable the patient to make an enlightened decision, the patient/research subject must be explained in details about the nature, duration, and purpose of the procedure/research; the method and means by which it is to be conducted and the inconveniences, complications and the hazards of the procedure, and the likely effects upon the health.

During the coming years, approximately eight more declarations of ethics were published by various international organizations. The first ones were the Declaration of Geneva by the World Medical Association and the International Code of Medical Ethics, which were published in 1948.[16] The Declaration of Helsinki, published in 1964, reemphasized the principle of informed consent for volunteers in biomedical research.

ETHICAL PRINCIPLES FOR MEDICAL RESEARCH AND PRACTICE

The ethical principles for medical research and practice as highlighted by the Belmont report for the protection of human subjects in the biomedical and behavioral research are as described below.[17]

Respect for the Patients

The doctors must show respect for their patients and research subjects by treating them as autonomous individuals and obtaining informed consent before undertaking surgical procedures or any medical or surgical procedure related to research. In the practice of obstetrics and gynecology, the doctor needs to develop respect for the patient as an individual as well as a woman.

Beneficence

This is based on the principle of "avoiding any harm". The doctors need to favor those procedures and treatments, which are likely to benefit the patients and avoid unnecessary harm.

Justice

The doctor should be fair in the process of selecting subjects or the patients. They should be treated fairly in the distribution of benefits and burden.

Other ethical principles for medical research and practice are described below.

Ethical Confidentiality

Trust is the foundation of physician-patient relationship. This is based on the fact that the patient has the right to privacy, which must be always respected. Patients may disclose their private information to the doctor. This is especially the case in the gynecological practice, where the patients share sensitive information related to intimacy and sexuality with their doctors. Confidentiality, therefore, forms an important aspect of successful therapeutic relationship. According to the code of ethics of the American Medical Association (1957), "A physician may not reveal the confidences entrusted to him in the course of medical attendance or the deficiencies he may observe in the character of patients, unless he is required to do so by the law or unless it becomes absolutely necessary to protect the welfare of the individual or the community."[18] The parameters within which the breach of confidentiality would be justified are still controversial. Reporting of sexually transmitted diseases, which may pose to be serious risk to the public health, may be permitted in some US states. In gynecological practice, a variety of complex and difficult situations may arise, where the doctor is faced with the dilemma of whether or not to maintain patient confidentiality. For example, when a woman seeks a medical termination of pregnancy (MTP) or sterilization and requests confidentiality from her partner, the doctor may be faced with a dilemma. In most cases, obligation to patient confidentiality predominates.

Informed Consent

Before undertaking any surgery, it is important for the gynecologist to take informed consent from the patient. Today, the informed consent is required for all operative procedures. The process involves counseling the patient about the various available surgical options so that the patient can select the best surgical procedure out of the various available options. In practice, the informed consent involves informing the patient about the diagnosis, degree of certainty regarding the diagnosis, the surgery that would be recommended in that case and possible alternatives along with their expected outcomes, risks, and benefits. The patient outcome, if no therapy is administered, must also be explained to the patient. The consent should be taken well in advance of surgery in a comfortable setting. The patient must be given adequate time to absorb the information, ask any questions if she feels so and then to make an informed decision. Effective communication between the patient and the surgeon is of

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utmost importance, while counseling the patient regarding various available treatment options. The surgeon may make use of written material (self-explanatory patient leaflets), visual aids (models), websites, etc. to explain the procedure to the patients. The patients must also be informed about the advantages, disadvantages, success and failure rates, and complications of the various procedures. The patient must be counseled even regarding the rare complications that are serious and may affect the individual's life. The patient should be given adequate time to interpret and absorb the information presented to her before making the final decision. At no point, must it be taken for granted that the patient would be herself able to understand the general risks of surgery, e.g., anesthetic complications.

Elements of Informed Consent

The informed consent requires the following pieces of information: nature of the procedure, rationale of doing the procedure, advantages and disadvantages of doing the procedure, and availability of alternatives. If the surgeon encounters an additional pathology at the time of surgery in addition to one for which the informed consent was taken, then the surgeon must first finish the planned surgery and discuss the condition later with the patient. The exception to this rule is the discovery of a life-threatening pathology in which case the surgeon can legally perform surgery in the patient for that condition. The elements of informed consent are as follows:[19]

- Disclosure of information
- Comprehension by the patient
- Voluntary transaction
- Validation

Disclosure of information: The patients must be explained about their diagnosis and also briefed about the various available treatment options, including no treatment and various medical, surgical, and alternative therapies. Risks and benefits of each modality need to be explained in sufficient details so that a reasonable adult patient can understand the situation and make an informed choice.

Comprehension by the patient: The language and the descriptive material, which are used to explain the situation to the patient, must be appropriate to the patient's level of comprehension. The patients must be asked questions in-between to ensure that they understand what they have been told.

Voluntariness: While making a decision, the patient must be free of coercion or constraints and must be able to choose freely. The patient should be mentally competent to be able to make a choice and there must be no evidence of limitation in her ability to understand the information. She must be in a condition to act independently on the basis of information that has been disclosed.

Validation: A written consent form must be given to the patient, which must be duly signed by her. Consent must be taken for each procedure, which is going to be performed even if they are being performed in a single setting.

There are four exceptions to the informed consent:

1. *Emergency situations:* If the relatives are unavailable, the patient is unconscious and is suffering from an emergency life-threatening condition.
2. *Intentional relinquishing by the patient:* Waiver may be given by the patient in case of research projects or exploratory laparotomy.
3. *The patient is mentally incompetent*, i.e., the patient has been declared to be mentally unsound to be able to understand and take decisions appropriately. In this case, the court takes the responsibility for the patient.
4. *Therapeutic privilege:* In case the patient is unconscious or is in the state of confusion and there are no relatives, the physician can act in the patient's benefit without taking her consent.

Surgical Competence as a Moral Commitment

Competence of the surgeon is a moral commitment towards the patient, especially if the surgeon wants to undertake a new procedure. It is essential that the surgeon has been appropriately trained in the clinical sciences and surgical techniques, especially before any new procedure is introduced into clinical medicine.

Ensuring the Appropriate Preoperative Status

The women must be in their optimal preoperative health status before any surgery is undertaken. The following points must be kept in mind:

- The women who smoke must be encouraged to stop smoking 8 weeks prior to surgery or, if not possible, at least 24 hours prior to the surgery in order to reduce the levels of carboxyhemoglobin in their bodies and to minimize the cardiovascular effects of nicotine in the body.[20]
- The women must be screened for sexually transmitted diseases (STDs) before undertaking any pelvic procedure.
- Routine blood tests in order to estimate the patient's hemoglobin levels must be done prior to the procedure.
- Detailed history must be taken and a detailed general physical examination be done.
- The woman must be advised to stop using oral contraceptive pills 1 month prior to the major surgery. In case the patient recently had a myocardial infarction, the surgery must be delayed at least for a period of 3 months.

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- All patients undergoing elective surgery must be screened for methicillin-resistant *Staphylococcus aureus* (MRSA).
- *Ruling out the presence of preexisting medical disease:* This is important because the morbidity and mortality related to surgery and anesthesia is increased in women with coexisting diseases, such as ischemic heart disease (IHD), hypertension, chronic respiratory diseases, cardiac arrhythmias, etc.

In case there is a presence of concurrent illness, the surgeon must liaise with the anesthetist and other specialists in order to evaluate the complexity of the patient's situation. In this context, the American Society of Anesthesiologists (ASA) scoring system **(Table 2.2)** can prove to be a useful communication tool.[21]

Risk Management

Over recent years, there has been a growing appreciation that a small but significant proportion of patients may experience adverse events, as a result of an error on the part of the healthcare workers, e.g., errors in the route of administration or dosage of medicines by the nurses. Sometimes, these events may prove to be serious or even life-threatening. Over the past few decades, there has been an increasing trend toward application of principles of risk management in healthcare organizations. Since small errors can result in particularly disastrous and costly adverse outcomes in both obstetrics and gynecology, it is appropriate to review clinical risk management issues. Risk management involves the ways in which these errors can be identified and analyzed and subsequently reduced. It involves examining the various procedures, right from the beginning until their end. The various incidents and accidents are analyzed to prevent their occurrence. This is based on the principle that simple system errors can result in some of the most devastating mistakes. The concept of risk management is based on the following strategies:[22]

TABLE 2.2: The American Society of Anesthesiologists (ASA) physical classification system.

ASA classification	*Definition*
ASA-1	Normal healthy patient
ASA-2	Patient with mild systemic disease which is controlled and does not affect normal activity
ASA-3	Patient with severe systemic disease which limits activity
ASA-4	Patient with severe systemic disease which is incapacitating and a constant threat to life
ASA-5	Moribund patient not expected to survive >24 hours with or without surgery

- Identification, characterization, and assessment of potential threats
- Assessment of the vulnerability of critical assets to specific threats
- *Determining the risk:* This involves assessment of the expected consequences of specific types of attacks on various assets
- Identifying ways to reduce those risks
- Prioritizing risk reduction measures

An educational and supportive environment, rather than a blame culture, helps in encouraging the reporting of adverse incidents. This encourages the staff to learn from the adverse outcomes. Reduction in the adverse events, which occur in healthcare institutions, helps in improving the overall quality of patient care.

PATIENT COMMUNICATION

In order to communicate effectively, the surgeon needs to develop the art and skill of listening. The surgeon must tell the patient regarding what will be done to her body at the time of surgery and what are the consequences, surgery can have on her life postoperatively. While the patient expresses her feelings, this results in the revelation of her knowledge, fears, and biases. The surgeon can help her to cope up with them by supplementing her knowledge with the appropriate explanations regarding the anatomy and physiology of her body parts. The usual preoperative, operative, and postoperative routines must also be described in detail. The surgeon must also explain the patient about various physical sensations (pain, discomfort, inability to walk, etc.), bandages, incisions, catheters, tubing, and medications. Patients own role in her convalescence and recovery must also be defined. The most common complications, which are likely to occur as a result of surgery must be explained to the patient. Before undergoing surgery, the woman may feel lonely, frightened, and sick. It is the duty of the surgeon to make her feel more relaxed, calm, and peaceful by allaying all her fears and anxieties. The therapeutic laying on of the surgeon's hands over the patient's shoulders or head may work wonders at time. A healing touch can often comfort the distressed patient when the words may not prove to be adequate.

The patient's family is an important part of her support system. If the patient so desires, the surgeon must involve the patient's family in decision-making process. They should be provided with an adequate amount of information, reassurance, support, and attention. If the patient requests the presence of family members, they should be allowed wherever feasible. The surgeon must

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be available to the patient, in case she wants to contact him/her for further clarification or information.

Verbal Communication

Verbal communication with the patient must be based on the following parameters:

- The doctor must use the vocabulary which the patient understands.
- The doctor must provide appropriate amount of information to the patient, neither too less nor too much that it results in information overload. One of the most difficult questions for the clinicians to answer is, "how much is too much?" The problem is further aggravated due to perceptions regarding litigations.
- The clinicians should make sure that they properly greet the patient before they start taking the history.
- The doctor must ensure that the patient is at ease by using an appropriate body posture and facial expression.

Besides the patient-doctor communication, the surgeon also needs to pay attention toward the doctor-doctor and doctor-nurse communication, all of which are equally important.

Written Communication

These include maintaining the patient's records and sending letters to other healthcare professionals.

Clinical Records

Well-maintained clinical records help in maintaining communication with other professionals and in the protection of the patients. They may serve to protect against the future medicolegal litigations. Poor quality records are likely to confuse other healthcare professionals, thereby endangering the patient's life. Records must be either typed or written in legible handwriting. Preferably, these records must be dated, timed, and signed. Concise information must be presented in these records. The physician must not try to present any information, which is not based on evidence. Multidisciplinary team approach must also be practiced and other clinicians may be involved, if the gynecologist feels the requirement.

PSYCHOLOGICAL PREPARATION OF THE PATIENT FOR SURGERY

The surgeon can help to prepare the patient psychologically by providing support in form of reassurance, providing adequate information, and any other form of support to help her deal with the emotional distress related to gynecological surgery. It is not only doctors, but also patients who have certain ethical responsibilities. They need to reveal truth regarding their symptoms, medications, past medical and sexual history, and history of any stressful life event. The patient is likely to react to surgery in the same way she had reacted to that event. Once the surgeon knows the answer, he/she can start the psychological preparation of the patient. Psychological preparation for surgery is supposed to be effective by reducing negative impact of surgery on the quality of life, pain, medication use, behavioral recovery, and physiological function. The surgeon should be with the patient at the time of administering anesthesia. Simply holding the patient's hand at the time of administering anesthesia would help her to feel safe. Psychosexual rehabilitation may be important after gynecological surgery to help restore her sexual function, sexual identity, body image, and self-esteem. Common emotional responses to surgery are given below.

Insecurity

Feelings of insecurity and vulnerability are common among women undergoing surgery. The surgeon can diminish these feelings by ensuring the patient that the surgery is likely to improve the quality of life by providing improvement in the various parameters, such as relief of pain, removal of cancer, improvement of the quality of life, restoration of fertility, etc. If the patient is convinced that she would be better than she is before surgery, she is likely to trust and believe her surgeon and feel less insecure.

Anxiety or Fear

The patient faces fear of unknown at the time of hospitalization. Proper information about the surgery and recovery process would help to allay this fear and anxiety. The surgeon is also responsible to ensure that the rest of the hospital staff involved in the surgery also behaves positively with the patient. There is also fear regarding the loss of economic competence for an uncertain length of time. This may be especially important, if the patient is the only earning member of the family.

Regression and Dependency

People who are ill or who undergo surgery tend to regress into a more dependent state. It may be difficult for the family to deal with a woman, who is no longer self-sufficient or is emotionally unstable. This can lead to anger and frustration on part of the relatives and friends.

The prospects of surgery as well as feelings of non-health are likely to contribute to emotional fragility, including the feelings of sadness, depression, tearfulness, and irritability. The women are vulnerable to attack on all personal and professional fronts.

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Grief and Depression

Grief is a normal and natural reaction to illness or loss of any kind. Grief is essential for emotional healing. By recognizing the various stages of grief, the surgeon is able to help the patient understand, regarding what is happening to her.

Postsurgical depression is also a common finding in patients who have undergone surgery. She may experience the feelings of helplessness, hopelessness, and worthlessness. Other symptoms of depression may include midnight-depression, insomnia, nightmares, loss of appetite or excessive eating, lethargy, difficulty in making decisions, psychosomatic symptoms, and fatigue.

EVIDENCE-BASED MEDICINE

Traditionally, surgical practice has been experiential and based on the contemporary understanding of basic mechanisms of disease. Surgery was considered to be an art and was largely based on experience. There was a change in this trend with the emergence of "evidence-based medicine" in the 1980s. There is no doubt that the use of evidence-based medicine has been beneficial, but over-reliance on randomized controlled trials and the scientific evidence may not prove to be useful for providing individualized surgical care to the patients. There has been a continuing debate between the practice of "experience" or "evidence-based medicine", while providing care to the patients. The situation is improving, but inevitable tensions remain between the surgeon committed towards providing individualized patient care and the clinical researcher, whose focus is on the results of randomized controlled trials. The ethical principles, which must be kept in surgeon's mind before administering treatment to any patient, include the following: the interests of their patients must always be paramount; any recommendation to a patient must be supported by the best available evidence; before implementing any new intervention or procedure, it must have been properly compared with the currently accepted method(s).

CONCLUSION

Oaths, codes, and guidelines for the ethical practice of medicine date back to the Hippocratic Oath of the 4th century BC. Though this oath was largely forgotten at the time of its composition, it achieved a place of prominence in the 18th and 19th centuries as a result of renewed interest in the field of medical ethics. Surgeons were not involved in the Hippocratic Oath or the "Medical Code of Ethics" devised by the American Medical Association (AMA), in 1847. The earliest ethics composition by surgeons was the ACS fellowship pledge, devised by Dr Miles F Porter in 1913. Over the centuries, with the changing medical practice and increased emphasis placed on patient autonomy, managed care and rapidly developing technologies, the long-practiced ethical concepts from the Hippocratic Oath and AMA Code of Medical Ethics have been largely altered. These new forces have caused surgeons to seek greater responsibility in discussing and deciding various bioethical issues. Taking informed consent from the patients prior to surgery ensures that their autonomy is respected. Clinicians are responsible for maintaining their medical and surgical competence. The patient's confidentiality must be protected at each stage. It can be overridden only under exceptional circumstances.

MRCOG QUESTIONS

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Tips & Tricks in Operative Obstetrics & Gynecology for MRCOG



The third edition of the book, "*Tips & Tricks in Operative Obstetrics & Gynecology for MRCOG*" provides succinct details about various obstetrics and gynecological surgeries, which will be very useful to the postgraduates, especially those preparing for the MRCOG examination, Fellow Gynecologist in training, Obstetric and Gynecological Consultants, and Practitioners. Some key features of this book include:

- Comprehensive yet concise coverage
- Expert insights
- Illustrative visuals
- MRCOG exam-oriented approach.

Each chapter of this book has a unique style of presentation in the form of a template comprising of different headings such as introduction, indications, preoperative preparation, surgical steps, postoperative care, advantages, disadvantages, complications, discussion, and conclusion. This would help the readers to focus on specific aspects of surgery. The book also features a QR code, which upon scanning would provide access to supplementary online content, comprising important questions (both SBAs and EMQs) from perspective of MRCOG examination in an interactive format, videos pertaining to the discussion of MRCOG questions, as well as discussion of some important case studies in obstetrics and gynecology. The videos also encompass the discussion of the latest Green Top Guidelines (GTG) wherever relevant. Besides this, references for each chapter have also been given online to enable the readers directly reach the actual article or its abstract upon clicking the reference link.

In the third edition, the textual matter has been extensively reconstructed with several current developments that have taken place in the field of obstetrics and gynecology since the publication of the second edition (e.g., new FIGO Staging of Endometrial Cancer, 2023, etc.). The text has been illustrated with the help of newly added beautiful self-explanatory multicolored pictures, tables, and flowcharts. It also elaborates the recent advances in gynecological surgery (e.g., robotic surgery, laparoendoscopic, single site surgery, etc.). Besides this, two new chapters pertaining to Surgery for Urogenital Fistulas and Surgery for Cancer during Pregnancy have been added in this third edition.



Richa Saxena is an Obstetrician Gynecologist, RCOG Associate with 1.5 decades of academic experience and an esteemed author of many best-selling books for undergraduate and postgraduate medical students as well as MRCOG aspirants (inclusive of all the three parts of the MRCOG examination). She is also a co-author of the book, *Jeffcoate's Principles of Gynaecology*, 9th edition, considered as bible of gynecology for postgraduates. She is also the Mentor and Director of e-learning MRCOG online course modules on an E-learning platform, DigiNerve, for all the three parts of the MRCOG examination. She did her graduation from Maulana Azad Medical College and postgraduation (MD, Obstetrics and Gynecology) from New Delhi. She was outstanding in academics throughout the medical course and subsequently only followed the upside of growth curve through hard work and determination. Besides being a prolific author to more than a dozen medical books in obstetrics and gynecology, she is an excellent Teacher, Revolutionary Thinker, exceptional Doctor, and an ardent promoter of women's health. Let's Talk Woman's Health is her initiative dedicated towards **E**mpowering and **E**nlightening women through **E**ducation and **E**-consultation. As a step towards patient education and empowerment, she has taken many online courses on Udemy related to the topics of importance from the perspective of woman's health. To know more about her, kindly visit her website, *www.drrichasaxena.com*.

She is a recipient of the Rotary Vocational Excellence Award (2017–2018) for her exemplary service towards medical education in the specialty of obstetrics and gynecology. She has also received the Women of Substance Award (category healthcare) for the year 2022.

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