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Clinical Ethics) A Practical Approach to Ethical Decisions in Clinical Medicine

Chapter ,. Medical Indications

This chapter treats the indications for or against medical intervention. In most cases, treatment decisions based on medical indications are straightforward and do not present obvious ethical problems.

An example of a case is

"A patient complains of frequent urination accompanied by a burning sensation. The physician suspects a urinary tract infection, obtains a confirmatory culture, and prescribes an antibiotic. The physician explains to the patient the nature of the condition and the reason for prescribing the medication. The patient obtains the prescription, takes the medication, and is cured of the infection."

This is a case of clinical ethics, not because it shows an ethical problem, but because the principles which are considered necessary for ethical medical care, namely, respect for autonomy, beneficence, nonmaleficence, and justice, are fulfilled in the clinical circumstances of this case.

This case, which raises no ethical concerns, would present an ethical problem if the patient had maybe stated that he did not believe in antibiotics, or if the urinary tract infection was developed in the last days of a terminal illness, or if the infection was associated with a sexually transmitted disease where sexual partners might be in danger, or if the patient could not pay for the care. Sometimes these issues can be solved easily other times it causes huge problems in management of the case at hand.

Defining medical indications

In this chapter, we first define medical indications as those facts about the patient's physiological or psychological condition that indicate which forms of diagnostic, therapeutic, or educational interventions are appropriate. Medical Indications describe the day-to-day work of clinical care for patients—diagnosing their condition and providing helpful treatments.

The ethical principles that should govern these activities are the principles of beneficence and nonmaleficence

beneficence which primarily means the duty to try to bring about those improvements in physical or psychological health that medicine can achieve while Nonmaleficence means going about these activities in ways that prevent further injury or reduce its risk.

Benefit–Risk Ratio

In medicine, beneficence and nonmaleficence are assessed in what is called "Benefit–Risk Ratio" reasoning. This is because every medical procedure poses some degree of harm to a patient so, the principles of beneficence and nonmaleficence do not just instruct the clinician to help and do no harm; they come together to guide the clinician's assessment of how much risk is justified by the intended benefit.

The Therapeutic Relationship and Professionalism

The ability of a physician to benefit the patient by his or her medical knowledge and skill, as well as the expectation and desire of the patient to be benefited by these skills, is a key moral aspect of a therapeutic relationship. The principles of beneficence and nonmaleficence are the core ethical aspects of this relationship.

Professionalism encourages placing care for the patient ahead rather than favoring personal, private goals. The benefits of medicine are at its peak when physicians and other health professionals demonstrate a professionalism that includes honesty and integrity, respect for patients, a commitment to patients' welfare, a compassionate regard for patients, and a dedication to maintain competency in knowledge and technical skills. In manifesting these virtues, professionalism and ethics are linked.

A Clinical Approach to Beneficence and Nonmaleficence

The general principles of beneficence and nonmaleficence must be situated in the clinical circumstances of the patient. In order to do this, clinicians must first consider the topic of Medical Indications by answering five questions

1. What is the patient's medical problem? Is the problem acute? chronic? critical? reversible? emergent? terminal?
2. What are the goals of treatment?
3. In what circumstances are medical treatments not indicated?
4. What are the probabilities of success of various treatment options?
5. In sum, how can this patient be benefited by medical and nursing care, and

how can harm be avoided?

In every case, the general goals are made important by understanding the nature of the disease involved and the range of appropriate treatment available. Also most of the general goals of medicine can be achieved simultaneously and however these goals conflict one another as well. In every medical case, goals must be clear and their conflicts must be well understood.

An old medical maxim sums up the goals of medicine concisely; "cure sometimes, relieve often, comfort always.

An ethical problem may appear in a case if the goals of intervention are poorly defined, unclear or overtaken by the rapid course of disease.

Sometimes the ethical problems merely reflects a failure to clarify for all participants of feasible goals that the physician has identified

In every case, patients and physicians should clarify the goals of intervention when deciding on the course of treatment.

Four typical cases

The patients in these cases are given their name and their diagnosis. These pseudonym are chosen to suggest prominent features of their medical condition.

Case ,

Mr. Cure a - year old graduate student was brought to the emergency room(ER) by a friend. Previously in a healthy state, he is complaining of severe headache and stiff neck. Physical examination shows a somnolent patient without focal neurologic sign but a temperature of . (. *C and nuchial rigidity. An examination of spinal fluid reveals cloudy fluid with white blood cell count of - ; a gram stain of the fluid shows many gram positive diplococci. A diagnosis of bacterial meningitis is made, administration of antibiotics is recommended.

Case -

Ms cope is a - year old woman who insulin dependent diabetes was diagnosed at age ,'. Despite good compliance with an insulin and dietary regimen, she experienced several episode of ketoacidosis and hypoglycemia, which necessitated repeated hospitalization and ER care. For the last few years her diabetes has been controlled with an implanted insulin pump. Twenty years after the onset of diabetes, she had no functional impairment from her disease. However fundoscopic examination reveals aoderate number of microaneurysm and

urinalysis shows increased microalbuminuria.

Case .

Mr. Care a year old man was diagnosed with multiple sclerosis , years ago. For the past ,- years, he has experienced progressive deterioration and has not responded to the medication currently approved to delay multiple sclerosis progression. He is now confined to a wheel chair and for - years has required an indwelling Foley catheter because of atonic bladder. In the last year, he became profoundly depressed, is uncommunicative even with family and hardly rises from the bed.

Case

Ms comfort is a ' year old woman with metastatic breast cancer. Three years ago she underwent a mastectomy with reconstruction. Dissected nodes revealed infiltrative disease. She revealed several courses of chemotherapy and radiation.

In the four cases presented no particular ethical problems were described. Some clinical ethical problems are related to changes in medical indications while some are due to the patient's preferences, quality of life and context of care. The first question examines the patient's immediate presenting problems as well as the patient's overall clinical condition which is centrally important for developing both clinical and ethical analysis of the situation. This information is usually found in the patient's chart. Any clinical assessment or any ethics consultation must begin with a complete review of this information.

The second question which is what are the goals of treatment. The analysis and resolution of an ethical issue often depend on clear perception. General goals of medicine are to cure disease, improve quality of life, promote health, prevent untimely death, improve functional status, educate and counsel patient, avoid harm to patient in the course of care and provide relief and support near time of death. Attention must be paid to these distinctions; acute, chronic, critical, reversible, emergent, terminal problem as specific to the patient's disease and to the particular circumstances of the patient. In many cases most of the general goals of medicine can be achieved simultaneously.

The general goals of medicine are as follows)

- 1.) Cure of disease
- 2.) Maintenance or improvement of quality of life through relief of symptoms, pain, and suffering

- 3.) Promotion of health and prevention of disease
- 4.) Prevention of untimely death
- 5.) Improvement of functional status or maintenance of compromised status
- 6.) Education and counseling of patients regarding their condition and prognosis
- 7.) Avoidance of harm to the patient in the course of care
- 8.) Providing relief and support near time of death

The Dying Patient

Many interventions become nonindicated when the patient is about to die. Here dying is used to describe a situation when clinical conditions indicate definitively that the patient's organ systems are disintegrating rapidly and irreversibly. Death can be expected within hours. This condition is sometimes described as "actively dying" or "imminently dying." In this situation, indications for medical intervention change significantly.

The Terminally Ill Patient

Judgments about whether certain interventions are indicated must be reevaluated when a patient is in a terminal condition. There is no standard clinical definition for terminal. Diagnosis of a terminal condition should be based on medical evidence and clinical judgment that the condition is progressive, irreversible, and lethal.

The Incurable Patients with Progressive, Lethal Disease

Certain diseases follow a course of gradual and sometimes occult destruction of the body's physiologic processes. Patients who suffer such diseases may experience their effects continually or intermittently, and with varying severity. Eventually, the disease itself or some associated disorder will cause death.

Clinical Judgment and Clinical Uncertainty

clinical judgment is the process by which a clinician attempts to make consistently good decisions in the face of uncertainty. clinical judgment is never absolutely certain because of the nature of medical science and the particularities of each patient given. The central task of clinicians is to reduce uncertainty to the extent possible by using clinical data, medical science, and

reasoning to reach a diagnosis and propose a plan of care.

The inevitable uncertainty of clinical judgment can be reduced by the methods of evidence-based medicine, using data from controlled clinical trials, and by the development of practice guidelines, which assist the physician's reasoning through a clinical problem. The ethical principles of beneficence and nonmaleficence reduce the scope of this sort of uncertainty by directing intention and effort away from the wide range of possible diagnoses and treatments and toward the more narrow range most likely to help this patient in these circumstances. The ethical principles do not dictate particular clinical decisions and these decisions must be confronted in candid, realistic discussions among clinicians, the patient, and the family.

Medical Futility

Medical Futility is ethical issue which is associated with the probabilistic nature of medical judgement. Medical futility has been inconclusive and it designates an effort to provide a benefit to a patient, which reason and experience suggest is highly likely to fail and whose rare exceptions cannot be systematically produced.

Clinical ethics consultation may assist clinicians to clarify when cure is possible. Medical interventions should be continued and when comfort should be the primary mode of care.

In every case, patients and physicians should clarify the goals of intervention when deciding a course of treatment. This is trying to envisage firstly, the physician's knowledge and skill in diagnosis and treatment. A physician must know how to set and reset goals realistically.

In what circumstances are medical treatment not indicated?

Firstly, the intervention may have no scientifically demonstrated effect on the disease to be treated.

E.g ; A high-dose chemotherapy followed by bone marrow transplantation for widely metastatic breast cancer or the use of estrogens for a postmenopausal woman in the mistaken belief that it will decrease the risk of coronary artery disease.

Note; Futility of treatment is only understood and justified when a patient condition won't get any better and not when the physicians are tired of providing necessary treatment of the patient. We should also avoid using the word "futility" when having a conversation with the family and patient.

This is only performed when a patient suffers cardiac and respiratory arrest without needing any order for the procedure. In some situations, patients often instruct by a written order not to resuscitate. This order is called Do-Not-Resuscitate or No code order. Except in a case where the patient advises to not resuscitate, physicians should ensure to resuscitate if and only if the probability for patient's recovery success is high.

Medical indications and contraindications for CPR)

All hospitalized patients who suffer unexpected cardiopulmonary arrest should be resuscitated unless the following occurs)

- 1.) There is conclusive evidence that the patient is dead, such as rigor mortis, exsanguinations, or decapitation
- 2.) No psychological benefits can be expected, because the patient has deteriorated
- 3.) Patient has a valid DNR order.

Comments)

A.) CPR is not indicated when cardiopulmonary arrest occurs as the anticipated end of the terminal illness, when all treatment options have failed. Because of this patient, a DNR order should be written.

B.) DNR Orders are first considered when the patient is in a terminal condition and death appears to be imminent.

C.) In the United States, the rate of DNR varies from .% to . % among hospitalized patients and % to - % among patients admitted to ICUs.

D.) Studies show that the success of CPR varies, survival after CPR are more likely to be for patients with)

*Respiratory rather than cardiac arrest

*No or few comorbid conditions

*Short duration of arrest.

E.) A DNR order applies only to decisions about CPR and does not influence

decisions about other interventions. DNR orders are often written when doctors, patient and surrogates intend to withhold or withdraw other life-prolonging treatments. A DNR order allows patient to die without burdensome resuscitative effort. This achieves the medical goal of peaceful death.

Cardiopulmonary resuscitation CPR is an emergency procedure that combines chest compression often with artificial ventilation in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest. It also consists of a set of techniques designed to restore circulation and respiration in the event of acute cardiac arrest.

The most common causes of cardiac arrest are

Δ Cardiac arrhythmia

Δ Acute respiratory insufficiency

Δ Hypotension

The omission of CPR after cardiopulmonary arrest will result in the death of the patients.

Basic CPR, consisting of mouth-to-mouth, ventilator and chest compression. Automated defibrillation devices are now available for use as well. In hospitals, advanced CPR is usually done by a trained team who respond to an urgent call. Since the 1970s, most policies have required that CPR be a standing order, that is CPR is performed on any patient who suffers a cardiac or respiratory arrest without needing any written order for the procedure.

DNR do-not-resuscitate and is frequently called a "no code order"

Questions have been raised about the standard policy requiring resuscitation except when a specific other authorized it. Some commentators believe that decision to resuscitate should be an affirmative order based on medical indication and patient preference. Under the present policies, however, the decision to a DNR order should be based on two crucial considerations

The first is the judgement that CPR is not medically indicated in the case, that is, not likely to restore physiological functions; it will be futile, in the sense explained in medical futility.

The second consideration is the permission of the patient or the designated surrogate. The medical futility of the intervention will be treated here; patient

preference surrogate decision.

DNR orders are usually first considered when the patients is in a terminal condition and death appears to be imminent, DNR orders survived to be discharge from the hospital.

Finally, they note that even a successful resuscitation in the crisis will likely lead to another crisis

Patient choice of DNR.

For terminally ill and dying patients, competent, non terminally ill patients etc. a DNR is an important component of advanced care planning, allowing them to express their preferences about treatments at the end of life.

Many patients are ready to forgo resuscitation because they are concerned that even if they are successfully resuscitated, they may experience anorexic brain damage or functional impairment or go in living through a painful terminal phase.

DNR Orders without or contrary to consent

The consent of the patient or the patient's surrogate is required to write DNR orders. Three situations raise questions about this general rule)

- 1.) A patient may be unable to give consent and no surrogate may be identified
- 2.) Medical indications may not support the utility of CPR, but surrogates insist it be done
- 3.) In emergency crisis, when rate of survival is low

It is essential to recognize that CPR is an innocuous intervention it may cause broken bones, bruising etc. Also when it is successful, another arrest may follow, instigating another resuscitation.

Documentation of DNR order) Code status should be clear to all who have responsibility for the patient particularly nurses and house officers.

The progress notes should include the medical facts and opinion underlying the order and a summary of the discussion with the patient, consultants, staff, and family.

DNR Portability

Patients for whom DNR orders have been written in the hospital may be discharged with the expectation that they will die soon. Often, patients want to

die in their own homes rather than in the hospital. Family members sometimes summon emergency services if these patients suffer a crisis at home.

POLST Order

POLST meaning physician order for life sustaining treatment. It is an order form that contains the choices of procedure the patient wants done and the ones that shouldn't be done. It is used to record all the patient's wishes in a single document to ensure that these wishes follow the patient across the health care setting. The form includes four sections which are cardiopulmonary resuscitation, Medical intervention, artificial administered nutrition and summary of medical condition. The form is signed by both the physician and patient. There are two codes used by the doctors and nurses in responding to patients in Washington, Oregon, California, West Virginia, North Carolina, Tennessee, and New York, *the slow code* and *the partial code*. The slow code is used when doctors and nurses respond slowly to a cardiac arrest and perform CPR without energy or enthusiasm to pretend that something is being done. And the partial code is practice of separating the various interventions which includes resuscitation and using them selectively. CPR is an integral procedure of several constituents and all these constituents should be applied unless the patient has objected. Patients may suffer a cardiac arrest during a surgical intervention. In such cases, anesthesiologists immediately initiate resuscitation. Patients for whom a Do Not Resuscitate order has been written, such a patient requires a palliative surgical procedure. The question is whether the DNR order should be suspended automatically during anesthesia or surgery so that resuscitation would be performed if the patient experiences a cardiac arrest. Some arguments were in favour of automatic suspension of DNR while some opposed the automatic suspension of DNR.

Medical error

Medical error is an unintentional lapse in a process usually done efficiently and effectively due to (,) inadequate information and/or (-) mistaken judgment and/or (.) defective maneuvers that may or may not be negligent, and may or may not cause harm. Every instance of presumptive error should be analyzed in terms of these elements. It is most important to determine whether or not the error was due to negligence, that is, a performance that peers in a specialty would judge as a departure from accepted standards of practice.

Determination of Death

The obligation to provide medical intervention ceases when the patient is declared dead. Declaring death is one of the legal duties of physicians.

The use of “brain criteria” for determination of clinical death was gradually accepted by legal jurisdictions. However, much confusion existed about their proper application. In particular, confusion existed between “total brain death” and “irreversible coma,” now called “chronic or continuous vegetative state” this confusion was the source of ethical and legal problems. An individual who has sustained either irreversible cessation of circulatory or respiratory function or who has sustained irreversible cessation of all functions of the entire brain including the brain stem, is dead.

The accepted clinical diagnosis of death by brain criteria is after ruling out confounding conditions such as drug intoxication and severe hypothermia, it should be demonstrated that there are no voluntary or involuntary movements except spinal reflexes and no brainstem reflexes; apnea is demonstrated in the presence of elevated arterial carbon dioxide when mechanical ventilation is temporarily halted, pupils are dilated, fixed at midposition and there is no reaction to aural irrigation nor gag reflex.

No medical goals are attainable for a person who is dead either by cardiorespiratory criteria or brain criteria, no medical interventions are indicated, and all current interventions should be terminated. Contextual features of a particular case might suggest a continuation of supportive technology.

Therefore physicians must distinguish the ethical and legal implications of death by brain criteria from the implications of the vegetative state. certain philosophical problems about the definition of death by brain in criteria remain open to debate . these disputes does not concern those responsible for clinical decisions on the matter. Physician in every legal jurisdiction can rely on the legal, clinical and ethical determinations.

Religious denominations have generally accepted this definition of death, the notable exception is orthodox Judaism, where many authorities insist on use of cardiorespiratory criteria for theological reasons.

Determination of death in children

The clinical method of determining death by brain criteria may be used for infants and children, but special caution is advised, because death cannot be determined with the same degree of certainty in young children as in adults. It is

assumed, although not proven, that the child's brain is more resistant to insults leading to death. Physicians responsible for making this determination in children should be familiar with the special clinical issues.

Naturally, the greatest sympathy and understanding must be extended to parents whose children have died. It is particularly important to make clear that death by brain criteria is distinct from vegetative condition; the term "brain death" confuses the two and should be avoided. Similarly, pediatricians should not speak of "removing life support" when ventilators are supporting breathing after a determination of death by brain criteria. Such language only reinforces the mistaken notion that the parents have "let their child die" by authorizing removal of ventilatory support.