



Medical Futility: Knowing When to Stop

Dennis M. Sullivan, MD, MA (Ethics)
Professor of Pharmacy Practice
Director, Center for Bioethics
Cedarville University

Email: sullivan@cedarville.edu

Session Objectives

- ▶ 1. Present a clinical case where the concept of medical futility might be invoked.
- ▶ 2. Give the proper definition and ethical parameters of this much-overused concept.
- ▶ 3. Show how treatment withdrawals should be handled in the context of palliative care and hospice.



Clinical Case Study

(PAY ATTENTION TO THE DETAILS, WE WILL BE ASKING FOR YOUR INPUT)

Case History

- ▶ Mr. M, a 72 year-old retired accountant, in severe respiratory distress
- ▶ Smoker since his teen years (two packs per day for 40 years)
- ▶ Quit smoking two years ago, but chronically short of breath
- ▶ Three hospital admissions for respiratory failure in the previous year (2 required mechanical ventilation)
- ▶ During four months prior to this admission: supplemental home oxygen
- ▶ Three days before admission → increase in shortness of breath, dry cough, and fever

Physical Exam

- ▶ Thin, chronically ill appearing man in acute respiratory distress
- ▶ Anxious and restless, respiratory rate 36 / min., using accessory respiratory muscles
- ▶ Blood Pressure 140/80
- ▶ Heart Rate 124 / min.
- ▶ Temp. 101.4 degrees F.
- ▶ Auscultation of chest: fine râles at right base

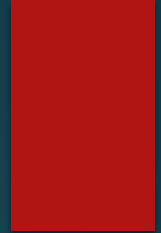
Laboratory



Chest X-ray: Right Lower Lobe infiltrate, consistent with acute pneumonia

White Blood Cell Count: 14,500 per cu. mm.

Clinical Course



- ▶ In the Emergency Department:
 - ▶ Patient intubated
 - ▶ Breathing supported with a mechanical ventilator
 - ▶ Admitted to Intensive Care Unit (ICU)
- ▶ In the ICU:
 - ▶ Diagnosis - chronic emphysema with superimposed acute RLL pneumonia and acute respiratory failure.
 - ▶ Treated with antibiotics and pulmonary support
 - ▶ Over several days, lung picture has improved
 - ▶ Temperature and white blood cell count have normalized

Clinical Course (cont.)

- ▶ Remaining Clinical Problem:
 - ▶ Multiple attempts to wean Mr. M from the ventilator have failed.
 - ▶ Off the ventilator, the patient becomes restless and agitated, with severe shortness of breath.
 - ▶ A tracheostomy is performed, but this fails to improve the situation.
 - ▶ On ICU rounds, some of the resident physicians wonder if further intensive management is “futile.”
- ▶ Nursing staff are uncomfortable, ask for an ethics consult

Case Discussion

- ▶ You are on the Ethics Committee
- ▶ Ethics Question:
 - ▶ Is it ethically permissible to discontinue ventilator support in this patient with end-stage pulmonary failure?
- ▶ Questions for your committee:
 - ▶ What additional information do you want to know?
 - ▶ How will you approach this case?

Ethics Consult

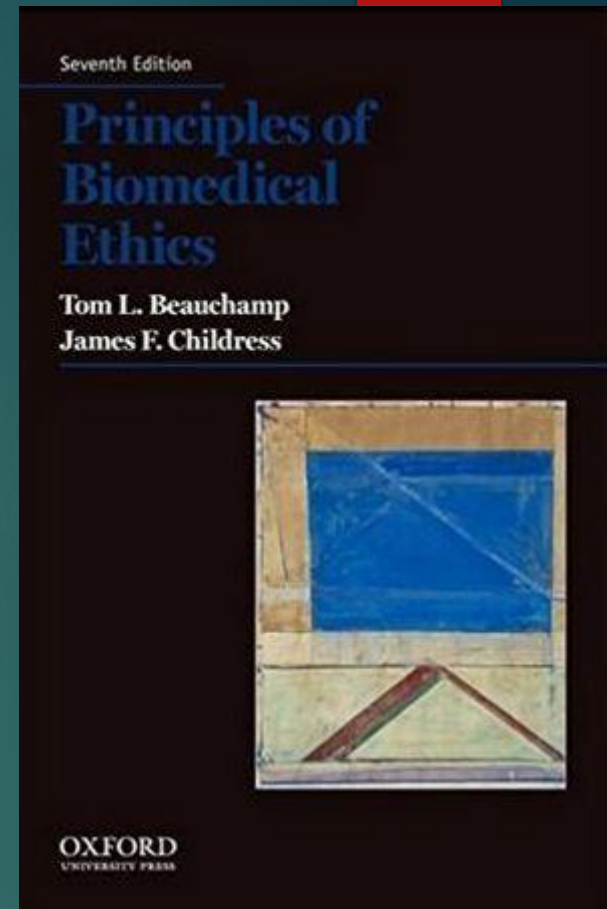
- ▶ This case history is ideal for ethics consultation.
 - ▶ May be an individual ethicist or a committee
 - ▶ In many cases, the ethical issues are clear
 - ▶ Main task may be simply to facilitate communication between the health care team and the family
- ▶ Consultation is NOT:
 - ▶ Legal cover for medical negligence
 - ▶ A critique of the current healthcare plan
 - ▶ A set of ethical directives to the physicians
 - ▶ A wedge for families to get their demands met
- ▶ Consultation IS:
 - ▶ Shared decision-making
 - ▶ A fresh look from an ethics perspective
 - ▶ A compassionate, caring encouragement to both providers and families

Ethics Decision-Making

- ▶ Clarification:
 - ▶ Determine the clinical facts
 - ▶ Analyze the treatment options
 - ▶ Identify who are the decision-makers
 - ▶ Elucidate the key ethical principles that are in conflict
 - ▶ **Identify the principle ethics question**
- ▶ Analysis – this should include:
 - ▶ Patient preferences (e.g., stated long-term wishes)
 - ▶ Quality of life (note limited role of healthcare providers)
 - ▶ Contextual features (religion, family dynamics, finances)

Medical Principlism

- ▶ Medical Principlism (Beauchamp and Childress)
 - ▶ Comes mostly from Hippocrates:
 - ▶ Beneficence
 - ▶ Non-Maleficence
 - ▶ Distributive Justice
 - ▶ Autonomy is more recent:
 - ▶ Legacy of Immanuel Kant
 - ▶ 18th Century



Some Definitions

Terminal Condition

- ▶ A disease or process that will result eventually in a patient's death
- ▶ No matter what treatment is given
- ▶ May include cases where death is inevitable but far off, as patients with cancer who live for years
- ▶ Imminent death: Death is expected within a short time, usually days or weeks

Withdrawing v. Withholding

- ▶ Withholding treatment: not starting it
- ▶ Withdrawing treatment: stopping an intervention already begun
 - ▶ The latter more difficult than the former
 - ▶ This is probably more psychological than real.
- ▶ (Example from training)

Would Treatment Withdrawal be Euthanasia?

- ▶ Greek roots: *eu* for “good,” and *thanatos* for “death”
- ▶ Means a “good” or “gentle” death
 - ▶ “Active” euthanasia: overt, deliberate killing of a patient:
 - ▶ Overdose of morphine
 - ▶ Potassium chloride to stop the heart
 - ▶ “Passive” euthanasia: withdrawing or withholding of treatment while the disease process takes its course to cause death
 - ▶ In other words, the distinction is between killing and letting die.

Is This Euthanasia? (cont.)

- ▶ “Active” euthanasia usually considered morally wrong, even if a patient requests it
 - ▶ Focus is on the agent who gives consent, rather on the ethical merits of the act
 - ▶ Physician-assisted suicide (PAS):
 - ▶ variation of active euthanasia
 - ▶ the agent that causes the death is the patient herself, with means provided by the physician.
- ▶ “Active” and “Passive” are irrelevant and not helpful
- ▶ **Euthanasia = intent to cause death as a medical treatment**

Intent is the Key

- ▶ Robert Orr:

- ▶ “Withdrawing or withholding treatment or artificial means of life support in someone who is dying is not euthanasia at all – not even “passive” euthanasia – but acceptable, humane, and an often necessary part of everyday medical practice”

- ▶ Henk Jochemsen:

- ▶ “Stopping disproportional medical treatment has always been good medical practice”

Principle of Double Effect (PDE)

- ▶ We are obligated to BOTH preserve life and relieve pain
- ▶ Example of morphine:
 - ▶ Two possible effects of morphine:
 - ▶ Relief of pain
 - ▶ Suppression of respiratory drive
 - ▶ Once again, the intent is important: If a treatment hastens death, but this is an unintended consequence of the intent to relieve suffering, then the act may be morally permissible.
- ▶ Applying the PDE in the case of Mr. M

Quality of Life Considerations

Quality of Life (QOL)

- ▶ Best definition: personal satisfaction expressed by individuals about their own physical, mental, and social situation. Based on autonomy.
- ▶ Case Examples:
 - ▶ 27 year-old gymnastics instructor is paralyzed after a spinal cord injury: “My life isn’t that bad. I’ve come to terms with my loss, and have discovered the joys of intellectual life.”
 - ▶ 68 year-old artist with complications of Type II diabetes faces blindness and multiple amputations for infections: “How can I endure a life of such poor quality?”

Common Feature of QOL



- ▶ Determination of QOL is best made by the patient herself (perhaps with her family), not by the healthcare provider.
- ▶ Doctors should therefore be very cautious in making judgments about QOL for their patients.



More on Withdrawing Treatments

- ▶ As noted earlier:
 - ▶ Withholding and withdrawing: morally equivalent
 - ▶ But only in an end of life context
- ▶ Older terminology:
 - ▶ Ordinary v. extraordinary (heroic) treatments
 - ▶ Vague and confusing
 - ▶ Example:
 - ▶ Ventilator use in a 78 year-old man with end-stage lung disease might be “heroic”
 - ▶ But ventilator in a 26 year-old woman after a car accident would be “ordinary”

Better terminology

- ▶ Proportionate v. disproportionate
- ▶ Greater precision in a clinical context
 - ▶ Example:
 - ▶ Ventilator use in a 78 year-old man with end-stage lung disease might be “disproportionate” for treatment goals.
 - ▶ But ventilator in a 26 year-old woman after a car accident would be “proportionate” to goal of restoring her to normal function.

Medical Futility

- ▶ Merriam-Webster: *futile*:
 - ▶ serving no useful purpose
 - ▶ completely ineffective
- ▶ But definitions of medical futility can be “confusing, inconsistent, and controversial.”
- ▶ Definition is often slanted to reflect the definer’s point of view.
- ▶ Invoking “medical futility” is often a code-word for unilateral withdrawal of treatment.

Medical Futility

- ▶ Vague, often abused concept:
 - ▶ When someone says, “Continuing treatment in this case would be futile,”
 - ▶ You should ask, “Futile for what? For what treatment goal?”
- ▶ This is where “proportionality” is helpful.
- ▶ You might say, “Continuing this particular therapy might be disproportionate for our treatment goals.”

An Example

- ▶ “CPR is futile in this elderly woman with heart failure.”
 - ▶ Overly vague and global
 - ▶ Even if the patient/family agree, still very unclear what is meant
- ▶ Perhaps better:
 - ▶ “CPR is futile for the goal of discharge from the Coronary Care Unit for Mrs. Jones.”
 - ▶ Tied to a treatment goal
- ▶ But even still, this is based on a probability
- ▶ Sometimes patients surprise us

Another Example

- ▶ “A third round of chemo in this patient is futile.”
 - ▶ Overly vague and global
 - ▶ Futile for what?
- ▶ Perhaps better:
 - ▶ Another round of chemo in this patient has a 2% chance of benefit.
 - ▶ The potential side effects would be severe and disproportionate to the goal of achieving a meaningful and comfortable prolongation of life.
- ▶ Patient-centered care: any such conclusions must respect patient autonomy.
- ▶ Interesting question: What % benefit would change all of this? 10%? 20%?

Ethical Pearl

From Robert Orr (my former mentor):

“Some treatments are futile, but care is never futile.”

Clinical Course of Mr. M

- ▶ ICU doctor discussed options with Mr. M. and his family (chaplain present)
- ▶ All agreed that ventilator burdensome, condition terminal
- ▶ Though on a ventilator, Mr. M. was fully alert; he and his family understood all implications
- ▶ Do Not Resuscitate (DNR) order entered in chart
- ▶ Breathing tube and ventilator removed
- ▶ 12 hours later → the patient died with wife and family present

Sources:

- ▶ AMA Code of Medical Ethics. 2017; www.ama-assn.org/delivering-care/ama-code-medical-ethics
- ▶ Beauchamp TL, Childress JF. *Principles of biomedical ethics*. 7th ed. New York: Oxford University Press; 2013.
- ▶ Cherny NI, Fallon M, Kaasa S, Portenoy RK, Currow D. *Oxford textbook of palliative medicine*. Fifth edition. ed. Oxford: Oxford University Press; 2015.
- ▶ Jonsen AR, Siegler M, Winslade WJ. *Clinical ethics: a practical approach to ethical decisions in clinical medicine*, 8th ed. New York: McGraw-Hill Education; 2015.
- ▶ Nair-Collins M. Laying Futility to Rest. *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine*. 2015;40(5):554-583.
- ▶ Oath and Prayer of Maimonides. 2017; <http://guides.library.jhu.edu/c.php?g=202502&p=1335755>
- ▶ Sullivan, DM, "Euthanasia Versus Letting Die: Decision-Making in Terminal Patients," *Ethics and Medicine*, 21:2, 2005.
- ▶ Swetz KM, Burkle CM, Berge KH, Lanier WL. Ten Common Questions (and Their Answers) on Medical Futility. *Mayo Clinic Proceedings*. 2014;89(7):943-959.
- ▶ White BP, Willmott L, Close E, et al. What does "futility" mean? An empirical study of doctors' perceptions. *Medical Journal of Australia*. 2016;204(8):318.



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