



# ISSUES OF LIFE

KENNETH ALONSO, MD, PHD, FACP

# What type of treatment

- ▶ A physician is under no obligation to accept any patient
- ▶ Having accepted the patient, the physician is obligated to treat that patient
- ▶ A physician has no obligation to offer treatments that the physician believes do not benefit the patient
- ▶ The patient can choose a treatment option that is within the standard of care
- ▶ The patient is not entitled to dictate whatever treatment is to be employed
- ▶ If there is a conflict, the physician must seek a suitable referral to another to maintain continuity of care

# Assessing decision making capacity

- ▶ The underlying point is whether the patient can reason and exercise judgment.
- ▶ Context: Does the person understand the situation they are facing?
- ▶ Choices: Does the person understand the options?
- ▶ Consequences: Does the person understand the ramifications of choosing various options?
- ▶ Consistency: does the person fluctuate in the understanding of choices?
- ▶ There are tools to assist in assessing capacity.

# Informed consent

- ▶ In order to obtain informed consent from a competent patient, the physician must outline in at least general detail the benefits and drawbacks to a particular treatment regimen. This should be written.
- ▶ This should include the important complications including the use of the words “disability” or “death”
- ▶ Too much detail is overwhelming for the patient, particularly if the patient has received a perceived life-threatening diagnosis such as cancer
- ▶ It is prudent to allow the patient to digest the information, and, to repeat it some time later until the information is understood.

# Informed consent

- ▶ In most states, if a paper has been signed granting consent, courts will not look into the extent of information provided to gain that consent
- ▶ If the patient is unable to participate in end of life care, one must discuss with the health care surrogate the reasons for withholding medical interventions or why treatment should be withdrawn.
- ▶ Seek consultation with those familiar with the values of the patient or health care surrogate. This may be ongoing.
- ▶ Have the discussion witnessed by having others involved in the care of the patient participate in the discussion.

# Withdrawal of treatment

- ▶ Withdrawal of treatment may be a conflict situation.
- ▶ It is prudent to coordinate with the hospital attorney.
- ▶ No “ethics consultation” is likely to resolve the conflict.
- ▶ Courts are unlikely to support a physician’s decision that treatment is futile (not likely to be of even marginal benefit).
- ▶ Courts often recognize that it is the hospital that is pushing for withdrawal of treatment for financial reasons.

# Living Will

- ▶ With a Living Will, one decides completely in advance whether one wants to be kept alive by technology.
- ▶ It is a "yes" or "no" statement, which then places the matter in the hands of the medical community.
- ▶ It is an unsatisfactory approach, as it does not provide for unforeseen circumstances.

# Advanced Directive

## Durable Power of Attorney

- ▶ The two documents are complementary.
- ▶ The Advance Directive states one's general will regarding aggressive medical care.
- ▶ To that extent it is like a Living Will.
- ▶ By making one's intentions known in the Advance Directive, one seeks to ensure that no one will disregard them when one is unable to make decisions for oneself.
- ▶ In practice, hospitals often overlook these directives.



# Advance Directive

- ▶ The Advance Directive should also include other important provisions:
- ▶ For example, the will to adhere to teachings of the patient's spiritual community on end-of-life decisions, especially in the matter of withdrawing nutrition and hydration.
- ▶ It should address matters of spiritual care, including, for Orthodox and Catholics alike, to receive the sacraments of the Church
- ▶ Should it become necessary, to receive a funeral and burial in keeping with that teaching and discipline of the patient's spiritual community.

# Durable Power of Attorney

- ▶ Since general provisions for the end-of-life cannot foresee all circumstances, the Durable Power of Attorney for Health Care Decisions, or Health Care Proxy, is also necessary.
- ▶ The Durable Power of Attorney legally empowers one's Proxy to make those decisions on one's behalf, in accordance with one's mind and will, as best as it is known.
- ▶ If there is any conflict, consult with the hospital attorney.

# Do not resuscitate orders

- ▶ An order to not resuscitate in the event of a cardiac event in a dying patient (asystole, ventricular fibrillation) must be discussed beforehand with the patient.
- ▶ It may be covered in the Advanced Directive.
- ▶ As a practical matter, even if the patient does not agree to the order, and, therefore, the physician does not write it, hospital staff are likely to make minimal resuscitative efforts (“slow code”).
- ▶ Usually aggressive resuscitative efforts involve 20-30 minutes of CPR with pharmacotherapy, ventilation, and defibrillation before the efforts are terminated as ineffective.

# Consciousness

- Awareness is not consciousness.
- The answer may be on the “tip of my tongue”. I am aware that I do not have the necessary information. I am conscious; but that is not consciousness. That is dissociated consciousness.
- Consciousness is the ability to reflect upon being conscious. Memory is required.
- Consciousness is a cross-talk mechanism for a subset of brain functions.

# Arousal and awareness

- Patients in coma cannot be aroused
- Patients who are asleep can be aroused
- Arousal in a patient with a pontine lesion is demonstrated through directed eye movements
- Patients who are awake but unresponsive to stimuli are unaware
- Patients in a vegetative state can be aroused but are unaware
- Inattention to verbal stimuli may be due to hearing loss

# Coma



- ▶ Coma is a profound state of unconsciousness.
- ▶ The individual is alive but unable to move or respond to the environment.
- ▶ The patient fails to respond to stimuli and will not display a normal sleep-wake cycle.
- ▶ Both the vegetative state and minimally conscious state may follow a coma.

# Coma

- ▶ Drug overdose, trauma, cardiac arrest are the three most common causes of coma.
- ▶ 2-33% of those resuscitated outside of the hospital survive to reach the hospital.
- ▶ 80% of those are comatose.
- ▶ 10-30% have meaningful recovery.
- ▶ There are no good clinical findings that predict a good clinical outcome.
- ▶ Cerebral O<sub>2</sub> stores are lost within 20 seconds of the onset of cardiac arrest; glucose and ATP stores are lost by 5 minutes.

# Persistent vegetative state

- ▶ There is loss of ability to think and of awareness of surroundings, but non-cognitive function and normal sleep patterns remain.
- ▶ Although they lose their higher brain functions, other key functions such as breathing and circulation remain relatively intact.
- ▶ Spontaneous movements may occur, and the eyes may open in response to external stimuli. They may occasionally grimace, cry, or laugh.
- ▶ They do not speak and they are unable to respond to commands.
- ▶ There is no swallowing reflex and no control over bowels or bladder.



# Persistent vegetative state

- ▶ Diagnose if present 6 months or more in the case of anoxic or metabolic brain injury
- ▶ Or present 12 months or more in the case of traumatic brain injury
- ▶ The prognosis is influenced by age, the underlying cause and its current duration.

# Persistent vegetative state

- ▶ A little over half of those in a vegetative state one month after trauma will regain awareness.
- ▶ With other causes, after a month in a vegetative state fewer than 20% will recover.
- ▶ The chances of regaining awareness fall as time passes. Beyond one year following trauma, and beyond six months in non-traumatic cases, the chances of regaining consciousness are extremely low.
- ▶ In the very small number of well-documented cases, recovery has usually been to a state of exceptionally severe disability.

# Minimal conscious state

- ▶ The patient has altered consciousness which is usually severe but there are aspects of awareness which are present, albeit inconsistently.
- ▶ [Patients in the Vegetative State - updated guidelines](#); Royal College of Physicians, 2013

# Brain death

- ▶ Death is generally obvious when the patient stops breathing and the heart stops beating.
- ▶ In the severely hypothermic patient, those are not reliable criteria. Re-warming must first be attempted.
- ▶ The question of brain death has arisen because of the need for organ harvest for transplantation, a utilitarian concern.
- ▶ The patient is usually on a ventilator.
- ▶ If it is demonstrated angiographically that there is no circulation to the cerebrum the patient is dead.
- ▶ This is based on clinical studies. No one has ever recovered from this situation.

# Brain death

- ▶ The apnea test provides definitive evidence of loss of brain stem function.
- ▶ The patient is oxygenated with 100% O<sub>2</sub> for 10 minutes to deplete alveolar N<sub>2</sub> stores
- ▶ The blood pH should be normal.
- ▶ The patient should be well hydrated.
- ▶ Systolic blood pressure should be maintained >90 mmHg
- ▶ The patient should not be receiving drugs that may paralyze the respiratory muscles.
- ▶ Low PEEP (positive end expiratory pressure) maintains PaCO<sub>2</sub>

# Brain death

- ▶ Apnea is concluded to exist when no breathing effort is observed at a  $\text{PaCO}_2$  of 60 mm Hg or with a 20 mm Hg increment from baseline as this is maximal stimulus to the respiratory center
- ▶ Brain death is also confirmed by bilateral absence of N20-P22 response with median nerve stimulation. (Sensory evoked potential).
- ▶ If angiographic studies are not available, or an apnea test cannot be adequately performed, or sensory evoked potentials cannot be performed, then serial EEG tracings over 24-48 hours demonstrating the absence of brain activity are sufficient to determine brain death.

# Brain death

- ▶ The brains of infants and young children have increased resistance to damage and may recover substantial functions even after exhibiting unresponsiveness on neurological examination for longer periods as compared to adults.
- ▶ When applying neurological criteria to determine death in children younger than one year, longer observation periods are required.

# Caveats

- ▶ These are not evidence for brainstem function:
- ▶ Spontaneous movements of limbs other than pathologic flexion or extension response
- ▶ Respiratory-like movements (shoulder elevation and adduction, back arching, intercostal expansion without significant tidal volumes)
- ▶ Sweating, flushing, tachycardia



# Caveats

- ▶ These are not evidence for brainstem function:
- ▶ Normal blood pressure without pharmacologic support or sudden increases in blood pressure
- ▶ Absence of diabetes insipidus
- ▶ Deep tendon reflexes; superficial abdominal reflexes; triple flexion response
- ▶ Babinski reflex

# Organ donation

- ▶ Despite any advance directive directing organ donation, the next of kin have control over the body of the deceased, and may refuse organ donation
- ▶ In some nations such as Spain and Austria, organ donation is presumed by law. An affirmative action by the living person is needed to contravene that presumption.
- ▶ A act of love.
- ▶ Strict criteria for the equitable distribution of organs exist.
- ▶ In the US there are deviations from those criteria in the name of “equity.”

# Resource allocation

- ▶ There are limited resources and the demand for them is infinite.
- ▶ Who benefits from these resources cannot be based on race, sex, age, income, or belief system.
- ▶ They can be apportioned on the basis of medical evidence:
- ▶ Organ allocation for transplant is stratified based on the extent of disease, the urgency, and the likelihood of success

# Resource allocation

- ▶ Triage.
- ▶ In a mass casualty situation, one may not treat an individual with a massive head wound who is likely to die or be left with significant impairment or one with multiple organ damage if the extraordinary time involved in treating those patients will lead to deaths of other patients who could be salvaged in that time frame.
- ▶ Should a poor country invest in expensive medical therapies that assist a few or invest in public health measures that assist many?

# Information sharing



- ▶ HIPPA rules notwithstanding, one may have to share confidential information with persons important in the family or support network of the patient.
- ▶ Homosexual unions not recognized in the state and for which the couple has no contractual agreement that recognizes reciprocal rights
- ▶ Will you not discuss with the “significant other” the status of the patient even though the patient’s family objects?
- ▶ What of the conflict between the latest spouse and the original family?

# Information sharing

- ▶ HIPPA is not as draconian as portrayed.
- ▶ Very few penalties are imposed.
- ▶ It is prudent to discuss such a conflict with the hospital attorneys.
- ▶ One cannot discuss matters gleaned at the bedside in a public place without permission of the one being discussed.
- ▶ Without permission, one cannot disclose information to the police nor to an insurance company.

# Counseling

- ▶ Emotional support is required in times of stress.
- ▶ Both for the physician and the patient and/or the family
- ▶ This may be provided by a priest or pastor or involve the psychiatric community.
- ▶ It is important to know the nature of the condition both to explain and to empathize.
- ▶ Empathy is often the only support one can offer.
- ▶ Job's friends sat with him for one week before speaking. Simple presence may be sufficient.

# Challenges to medical orthodoxy

- ▶ Patients often employ “alternative” health methods without disclosing it to the physician
- ▶ It is imperative that the physician be aware of whatever “alternative method” may be employed
- ▶ The best method to elicit this information is with empathy
- ▶ There are clinical trials that demonstrate osteopathic manipulation of the cervical or lumbar spine shorten the period of acute disability from pain by 1-2 days.
- ▶ At 6 weeks there is no difference in outcomes based on treatment methods. Look at the time frames in a report.



# Challenges to medical orthodoxy

- ▶ Chinese and Ayurvedic medicine often use herbal mixtures effectively. However, because of possible drug interaction, that information should be elicited by the physician.
- ▶ Western medicine is used in China and in India because it works and has largely been validated independently through clinical trials.
- ▶ As the physician does not participate in the rituals associated with Ayurvedic medicine or with Shamans, toleration of their use by the patient is not an endorsement of the ritual

# Challenges to medical

## orthodoxy

- ▶ High colonic irrigation is a means of detoxification.
- ▶ Water intoxication is a complication
- ▶ Macrobiotic diets have been popular in cancer therapy without evidence of efficacy.
- ▶ Often abrupt alteration of dietary habits may have unintended consequences.

# Challenges to medical orthodoxy

- ▶ As with aromatherapy or cupping or the use of crystals, if it does not deter the patient from pursuing evidence based medical therapy, why should it be a problem for the physician?
- ▶ Acupuncture has been validated clinically for the short term treatment of acute neck or lumbar pain as well as for migraine prevention.

# Challenges to medical orthodoxy

- ▶ The common cough suppressant, dextromorphan, stimulates Covid-19 replication in cell cultures.
- ▶ Should it be offered for sale over the counter?
- ▶ Codeine is an effective alternative for cough suppression but requires a prescription
- ▶ Decongestants have never been shown to be effective in the treatment of otitis media
- ▶ Why are they still prescribed?

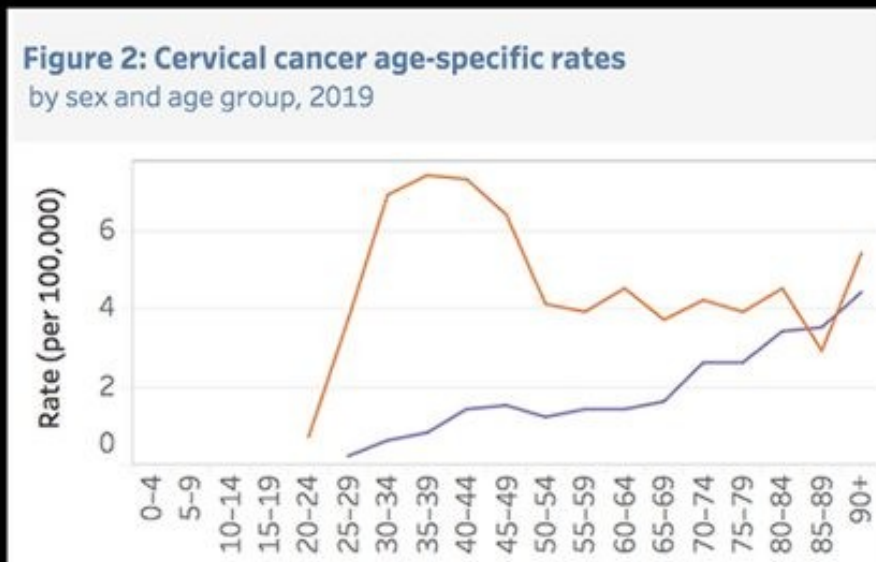
# Challenges to medical orthodoxy

- ▶ Vaccines are often made from cells from aborted fetuses
- ▶ Is the principle of double effect a reason to use vaccines developed from aborted tissues?
- ▶ Fetal DNA is present in vaccines developed from aborted fetuses.
- ▶ That women have autoimmune disorders with a frequency many multiples that of men has been thought to be related to exposure to free DNA whether through sperm or from the fetus.
- ▶ There are anti-aging cosmetics made from fetal tissues.

# Challenges to medical orthodoxy

- ▶ Mercury, a mitochondrial poison, and Aluminum are still found as preservatives or adjuvants in vaccines. Both are known to cause neurologic damage.
- ▶ Are these adverse effects to be dismissed because compensation for vaccine injury is available?
- ▶ Are they effective?
- ▶ Is public policy to vaccinate everyone not a conflict with personal autonomy?

## AUSTRALIAN DATA: Cancer Epidemic in Gardasil Girls



**Cervical Cancer  
Increased for  
25-29 yos — Why?**

Pre-licensing studies showed a 44.6% increase in cervical cancer among girls exposed to HPV virus prior to vaccination (up to 30% may be exposed in the birth canal).

# Challenges to medical orthodoxy

- ▶ The majority of clinical trials reported in the medical literature ask either the wrong question (poor design) or are under-powered to ask the question posed.
- ▶ Meta-reviews are an attempt to salvage usable information from these trials
- ▶ Examining subgroups looking for associations not initially considered is not simply moving the goal posts, it conflicts with the underlying hypothesis
- ▶ Read the fine print.
- ▶ Fraud is common.



# Challenges to medical orthodoxy

- ▶ Relying on a  $p < 0.05$  to determine significance gives rise to many errors (it's how the question is posed).
- ▶ For example, AZT was selected for AIDS therapy because there were 11 AIDS defining events with the 500+ person cohort given AZT and a similar cohort not receiving AZT. The groups were large enough that only a few dozen events were sufficient to provide a  $p < 0.05$
- ▶ Yet AZT did not affect outcome and was associated with a decline in the quality of life that the untreated cohort did not reach for another year.

# Challenges to medical orthodoxy

- ▶ Bevacizumab is a VEGF inhibitor developed for cancer therapy.
- ▶ Ophthalmologists began using the drug off-label to block angiogenesis in “wet” macular degeneration.
- ▶ There has never been a clinical trial to confirm the observation that the drug is very effective in preventing blindness in that condition
- ▶ The condition was previously untreatable.
- ▶ It would be unethical to have a non-treatment arm given the observed difference just to have a clinical trial.

# Challenges to medical orthodoxy

- ▶ The use of aspirin to prevent cardiovascular events was promoted by a California physician who noted the difference in outcome in his patients and published the findings in 1948.
- ▶ This observation was resisted for decades.

# Challenges to medical orthodoxy

- ▶ When reading the medical literature, read with skepticism.
- ▶ Financial interests are often paramount. The influence of Big Pharma over medical school (research) agendas and control of regulatory agencies is the “elephant in the room.”

# Challenges to medical orthodoxy

- ▶ A trial of N=1 is a valid trial.
- ▶ For example, your child has a problem with diarrhea.
- ▶ It has been determined that no obvious underlying medical problem exists.
- ▶ You drop back to a primitive diet and begin adding foods. At some point the diarrhea returns.
- ▶ You then remove what you believe is the offending item. The diarrhea ceases.
- ▶ That is a valid clinical trial