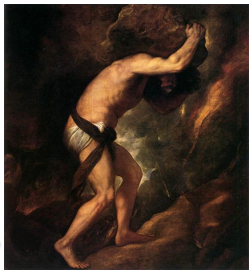
The futility of Futility

Corey Philpot MD, MA Bioethics

- "futilis"



In the beginning…

- Medical Ethics tradition:
  - "To refuse to treat those who are overmastered by their disease realizing that in such cases, medicine is powerless."
    - Hippocrates, *The Art*
- Physicians decided what is "futile"
- Paternalism

Traditional Commitments

- Not so terrible…
  - Hippocratic oath:
    - *I swear by…I will apply…measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice.*
    - *I will neither give a deadly drug to anybody who asked for it, nor will I make a suggestion to this effect.*
    - *Whatever houses I may visit, I will come for the benefit of the sick, remaining free of all intentional injustice, of all mischief…*
    - *What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men…I will keep to myself, holding such things shameful to be spoken about…*

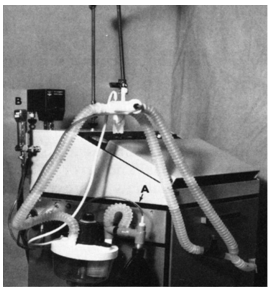
Banner Children's

Commitments Persist

- The American Academy of Pediatrics believes that physicians should provide life-sustaining medical care in conformity with current medical, ethical, and legal norms.
- 2 broad principles to guide therapy:
  - beneficence and nonmaleficence
    - clinicians justify the use of treatments based on the benefits they provide, not simply on the ability to employ them.
    - The related notion of nonmaleficence reminds physicians to consider potential harm to patients. Harm includes obvious physical problems such as pain but may also include psychological, social, and economic consequences.
  - autonomy
    - Our social system generally grants patients and families wide discretion in making their own decisions about health care and in continuing, limiting, declining, or discontinuing treatment, whether life-sustaining or otherwise.
      - AMERICAN ACADEMY OF PEDIATRICS Guidelines on Forgoing Life-Sustaining Medical Treatment Committee on Bioethics

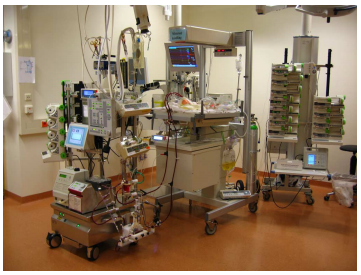
Banner Children's

Evolving?



Banner Children's

Steve Austin



Banner Children's

Banner Children's

Mostly dead or all dead?

- Biological processes can be sustained for months
  - Who is dead?
- Cardiac criteria or something else?
  - What about brain death? - individuals who have suffered brain death can be supported on mechanical ventilators indefinitely
  - are they alive or dead?
- Who wants to live?
- BIOETHICS IS BORN!

Banner Children's

Legal Changes

- Right to refuse care asserted by patients and legally granted (including surrogates)
- Assumption that care can be demanded despite physician expertise
  - Shallow Autonomy = whimsical choice

- Today we think of autonomy as simply freedom of choice. For Kant, however, the meaning of autonomy is far more robust.
- Autonomy - it is by the use of reason and adherence to duty that one becomes autonomous.
- By becoming autonomous, you enter into the "*mundis intelligiblis*" or world of rational beings and are therefore and "end"; never a means to accomplish something else.
- Medical translation – dignity, informed, honesty, full disclosure, participation with permission

Banner Children's

Back to Futility

- Keep it with the medical community based on combo of expertise and data?
- Or let patients/family define in moment, based on wants, values, religiosity?
- Or hospital/community policy based on economics?

- Perhaps we should eliminate futility as undefinable?

Banner Children's

Is something ever futile?

- Detractors have no substitute!
- Certain intuitiveness or common sense about futility.
- …know it when we see it.
- IT'S NOT GOING AWAY!

Banner Children's

futility

"…if the concept of futility is to play this function, it must be defined, procedurally or substantively, so as to satisfy a number of conditions including the following:

(a) the definition must be sufficiently precise so that it can be determined that it applies to the intervention in question;
(b) the definition must be prospectively applicable with a sufficient degree of probability;
(c) the definition must be socially acceptable in that there is general acceptance of a policy of unilaterally limiting care based upon it;
(d) the definition must apply to a significant number of cases;
(e) the definition must not contain as one of the components of the definition patient/surrogate agreement on limiting life prolonging interventions.."

Is futility a futile concept?, J Med Philos (1995) 20 (2): 123-144.

Banner Children's

Definition

- Must include Values from:
  - Physicians – presumably objective (prognosis, benefit, burden)
  - Patients – subjective (quality of life, value of life)
  - Family – subjective
  - Medical Team - objective
  - Community – combo (communitarian values, economic impacts)

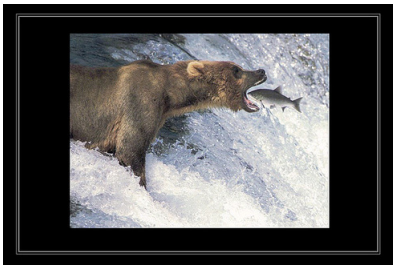
Banner Children's

Is something ever futile?

- Case example:
- 2y/o pool submersion
- ROSC in ED after 40minutes
- 2 days later – clinical exam consistent with brain death.
- Now - heart is slowing, stopping - parents ask that CPR be given to "save his life"
- Futile?

Banner Children's

Futility?



Attempts at harmony

- **Physiological futility**
  - Physiological futility describes medical interventions that could not possibly result in a physiological goal i.e. antibiotics for a viral infection.
- Assumptions:
  - medical intervention has a specific physiological goal
  - clinician is able to determine if achieving that goal is possible.

Physiological Futility

- Arguments:
  - Goals may exist other than the perceived physiological goal.
    - CPR on a terminally-ill patient - true goal is not to restore a spontaneous heart beat, but rather to give the family a measure of certainty that everything has been attempted.
    - the clinician's predictive abilities may not be that absolute.

Case

- 12 girl
- Large, growing brain tumor with metastatic disease to lungs, liver.
- Increasingly obtunded due to hydrocephalus, impending herniation
- Deteriorating resp status
- Surgery – brain tumor too massive to remove
- Is intubation futile?

Banner Children's

Futility definitions

- **Quantitative futility** —numeric probability of achieving the intended goal of therapy, which is generally presumed to be cure and survival.
- Requirements:
  - probability threshold - utilizes published data on medical outcomes incorporated with personal clinician experience to determine a probability of survival
  - judgment call on what level of likelihood should be the threshold for making a decision (some suggest < 1%)

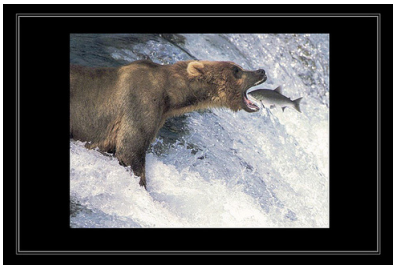
Banner Children's

Quantitative Futility

- Criticisms:
  - empiric evidence threshold
    - is ≤1 percent possibility of survival an appropriate threshold?
    - What if you believe 0.5% chance is worth it?
  - Empiric evidence is insufficient for predicting futility in all cases.
  - Studies start with bias
    - data may indicate 100% mortality because the traditional assumption of poor prognosis resulted in non-treatment = self fulfilling prophecy

Banner Children's

Futility?



Futility Definitions

- **Qualitative futility**
  - focus from achieving a level of certainty to a focus on the quality of the potential benefits
    - Incorporating the whole picture instead of individual body part, physical pathology, etc.
- Is end result worth it considering prognosis, burdens, benefits?

Qualitative Futility

- Criticism:
  - futility is subjective and requires individuals to make judgment calls on what constitutes quality of life
  - Prone to disagreement between clinicians, patients, and family members
  - Short survival with limited/less suffering and some improvement in quality of life = not futile
  - So, who should decide if its worth it?
- Vitalists
- Miracles

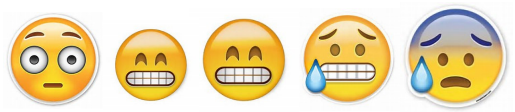
Case

- 9 y/o boy - spina bifida and chiari malformation.
- Daily life consists of wheel chair ambulation, self catheterization, and school attendance. Mental function is considered "normal" by caregivers.
- Hospitalized for surgical decompression of Chiari malformation
- Complication: a high cervical spine injury, now paralyzed from the neck down. There is no chance of recovery. (without a ventilator will die = unable to breath).
- Remaining function: can blink, some tongue movements
- Medical recommendation (by some) = tracheostomy, GTube, rehab hospital
- Futile?

Banner Children's

Solutions?

- LOL!??!



- No consensus

Banner Children's

Solutions?

- Physiological futility
  - Straightforward
  - Decision falls within purview of physician
  - Caveat: it has to be real futility!

Banner Children's

Solutions cont.

- Advance Directives
  - On paper, thoughtful
  - Real conversations with family
  - Appoint surrogate who will carry out your wishes
- Would solve most problems!

Banner Children's

Solutions cont.

- Policies of communication
  - Care conferences after unanimous opinion from medical team
  - Ethics Consultation
  - Hospital Futility Policies

Banner Children's