

Medical Ethics - What is Life and Death?

"All the days ordained for me were written in your book before one of them came to be"
(Psalm 139:16b)

1. When do you think human life begins?

- a. Definition of life (Webster's): "that property or quality of plants and animals that distinguishes them from inorganic matter or dead organisms; specifically, the cellular biochemical activity or processes of an organism, characterized by the ingestion of nutrients, the storage and use of energy, the excretion of wastes, growth, reproduction, etc." (pretty sterile)
 - o Where is "awareness?" the mind, emotions, thinking, decisions, etc.?
 - o Where is the "soul" and the "spirit"?
 - o Biblically, we can say our life is contained in, and defined by, the great commandment: "Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength" (Mark 12:30)
- b. One definition: "The breath of Life" (Gen 2:7; 6:17; 7:15,22; Ezek 37:5; Dan 5:23; Acts 17:25)
 - o "...he himself gives all men life and breath and everything else" (Acts 17:25)
 - o To Belshazzar: "But you do not honor God who holds in his hand your life ["breath" KJV] and all your ways" (Dan 6:23)
 - o To the dry bones: "Dry bones, hear the word of the Lord! This is what the Sovereign Lord says to these bones: I will make breath [wind, spirit] enter you, and you will come to life" (Ezek 37:5)
 - o "...the Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being" (Gen 2:7)
 - o "I am going to bring floodwaters on the earth to destroy all life under the heavens, every creature that has the breath of life in it." (Gen 6:17; 7:15,22)
 - o "Breath of life" = *pneuma* = wind, breath, mind, spirit
 - o Context dependent term that has a very large number of meanings
 - o "air in motion" or "breath"
 - o "a snort through one's nose", emotions of aggressiveness/anger (Isa 25:4; Prov 29:11)
 - o "mental awareness" (Ezek 11:5)
 - o "the entire immaterial consciousness of man" some analogy to soul (both can leave the body at death; Gen 35:18; Psalm 86:13)
 - o Giving of life after the physical man (Adam) was fashioned is accounted for by God "breathing" into him; it implies an awareness, life itself
 - o Implication is that life begins when it (man and animals) can breath, or when man is conscience - mentally aware
- c. Another definition: "Life is in the blood"
 - o "But you must not eat meat that has its lifeblood still in it. And for your lifeblood I will surely demand an accounting from every animal. And from each man, too." (Gen 9:4-5)
 - o "For the life of a creature is in the blood, and I have given it to you to make atonement for one's life" (Lev 17:11; 14)
 - o "But be sure you do not eat the blood, because the blood is the life, and you must not eat the life with the meat" (Deut 12:23)
 - o "Life" = *nepesh* (Hebrew)
 - o Broad range of meaning covering concepts such as: throat; appetite; soul; life; person
 - o Context shows the proper rendering is "life" - identifying the life of an animal (Lev) with its blood. The blood, therefore gives it its life (refraining from eating meat with blood in it honors life, eating blood despises life)
 - o Gen 9:4-5 shows that the same concept is applicable to man as well as the beasts
 - o Implication from this is that life exists when blood is present (for unborn babies, heartbeat and blood flows develop during the second month of pregnancy)
- d. Also, the Holy Spirit gives life

- o In referring to the creatures that God has created in the world, we find in Psalm 104:30 "When you send your Spirit, they are created, and you renew the face of the earth"
- o Implies that the Spirit grants life to creatures, "they" indicates identification as a living thing, not as a lifeless "thing" at the time of their creation (or coming into being). No intermediate state of non-life from conception until some time later is implied or stated
- e. But, we are sinful from conception
 - o "Surely I was sinful at birth, sinful from the time my mother conceived me" (Psalm 51:3-5)
 - o Also translated "I was shapen in iniquity"
 - o We inherit our parents sinful nature that has been passed down since Adam (Gen 5:3); at no time do we have a different nature (different "kind") then become human
 - o There is no time that our nature is not sinful until there is a spiritual nature given to us through faith (there is no protected time in the womb)
 - o Being inside the mother only prevents the infant from demonstrating his sin nature, once born it will manifest itself
 - o This implies that we are accountable for our very nature from our conception, suggesting that we are human, and of one nature from the very beginning
 - o "My frame was not hidden from you when I was made in the secret place. When I was woven together in the depths of the earth, your eyes say my unformed body. All the days ordained for me were written in your book before one of them came to be" (Psalm 139:15-16)
 - o The days ordained can refer to from birth, or from the context appear to apply from the beginning of his existence (conception)
 - o The personal reference implies that David existed from conception, there was not a time that he was an "it" vice himself
- f. When was Jesus not Jesus?
 - o From conception within Mary, Jesus was fully God and fully human (Matt 1:20,23)
 - o Christ's own example demonstrates that human life begins from conception. His divine nature and human nature were present simultaneously from conception
- g. When did we exist in God's mind?
 - o "All the days ordained for me were written in your book before one of them came to be" (Psalm 139:16b)
 - o God predestined us to exist in a specific time - He charted out our lives instant by instant (Acts 17:26)
 - o In a very real sense we existed in God's mind before our physical manifestation came into being (Isa 14:24, 26-27)
 - o In this sense, we have existed from before time, since God's forethought is an absolute promise that what He will's to occur will come to pass
 - o Jer 1:5: "Before I formed you in the womb I knew you..."
 - o "For he chose us in him before the creation of the world to be holy and blameless...he predestined us to be adopted as his sons...In him we were also chosen having been predestined according to the plan of him who works out everything in conformity with the purpose of his will..." (Eph 1:4,5,11)
 - o "...but with the precious blood of Christ, a lamb without blemish or defect. He was chosen before the creation of the world, but was revealed in these last times for you sake." (1 Peter 1:19-20)
- h. Related questions from a reasoning standpoint (ref 4):
 - o Is a male sperm or female ovum a human being? - No, each only has 23 chromosomes whereas a human being has 46. Also, they can only die or unite for fertilization at which point they individually cease to exist
 - o Is any human cell a human being? - No. A human cell is part of a human body, but a fertilized ovum (human zygote) has its own body. A cell can die while the body lives on, but a human zygote, or embryo cannot. Individual cells only produce their own kind of cell, not a whole human being
- o Does human life begin at conception (fertilization)? - Yes. This is when all human genetic characteristics are present, with its own genetic code (different from either parents) and

separate from the parents bodies. At no time after conception are any additional genetic characteristics added, what remains to occur is growth and development of a particular human individual (into infancy, childhood, adolescence, and adulthood)

- o What about twinning and recombination? Twinning: may be an individual dying to give life to two new identical beings; it may be a non-sexual form of "parenting"; or there may be a basic duality already there before the split. In recombination: one life may die when recombined. Illustration: think in terms of teenagers splitting and recombining, we would not judge the individual's right to life based upon the odd conditions

2. How would you define when physical death has occurred?

- a. Scripture does not present a definition of when physical death occurs
- b. Scripture does, however, present observations concerning physical death (easy in the "old" days):
 - o Joshua 11:14 "...but all the people they put to the sword until they completely destroyed them, not sparing anyone that breathed"
 - o 1 Kings 15:29 "He did not leave Jeroboam anyone that breathed, but destroyed them all"
 - o 1 Kings 17:17 "Some time later the son of the woman who owned the house became ill. He grew worse and worse, and finally stopped breathing"
 - o Job 27:3 "...as long as I have life within me, the breath of God in my nostrils, my lips will not speak wickedness..."
 - o Psalm 104:27-29 in referring to creatures on earth: "These all look to you to give them their food at the proper time. When you give it to them, they gather it up; when you open your hand, they are satisfied with good things. When you hide your face, they are terrified; when you take away their breath, they die and return to the dust"
 - o Isa 2:22 "Stop trusting in man, who has but a breath in his nostrils. Of what account is he?"
 - o Acts 17:25 "And he is not served by human hands, as if he needed anything, because he himself gives all men life and breath and everything else"
 - o The implication is that when breath stops, life stops! However, breath can be artificially maintained indefinitely when other bodily functions continue on
- c. Eccl 12:7 Indicates that God is the giver of the spirit of life and the One who calls it home. Also, that the leaving of the spirit of a man occurs at the time of death! "...and the dust returns to the ground it came from, and the spirit returns to God who gave it."
- d. Empirical (forensic) indications (observations) of death that are used medically include cessation of:
 - o Heartbeat
 - o Reflexes
 - o Body heat (energy production)
 - o Assimilating material from the environment into itself to replace used materials
 - o Cell growth
 - o Elimination of waste products
 - o Ability to overcome disease or injury
 - o Brain activity (brain waves)
 - o Flexibility (rigor mortis)
 - o Processes preventing putrefaction and decomposition of the body
 - o The converse is also true - presence of the above indicates presence of life!
 - o With the exception of rigor mortis, putrefaction and decomposition of the body (obvious signs of death), the other aspects can be artificially maintained, preventing body death
- e. The Ad Hoc committee of the Harvard Medical School (1968) defined tests for death as:
 - o Irreversible structural damage to the Central Nervous System
 - o Nothing can be depressing the brain's function (alcohol; barbiturate, hypothermia, etc)
 - o Brain stem reflexes - corneal, pupillary, gag and oculovestibular - must be absent
 - o There must be no respiratory effort during a satisfactory trial period

- o If any of the above not fulfilled, a confirmatory test to show the absence of cerebral blood flow is mandatory
- f. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1981), defined death as either:
 - o "Irreversible cessation of circulatory and respiratory functions" or:
 - o "Irreversible cessation of all functions of the entire brain, including the brain stem"
 - o Model legislation using this language is in the Uniform Determination of Death Act (UDDA)
- g. The focus of whether human life (the "person") remains within a body is the brain
 - o Brain basics:
 - o The whole body serves the brain, with the brain directing all activities of the body
 - o Most highly developed cells are located on the surface of the cerebral hemispheres - the neocortex (controls general movement; visceral functions; perception; behavioral reactions; integration of these functions; reasoning; creativity; value decisions; everything we associate with personality)
 - o When glucose and/or oxygen are denied, the brain begins to die: first the cerebral cortex (highest functions); second the midbrain; finally the brain stem
 - o "Whole brain death" is defined as cessation of all brain activity (see standard above)
 - o Electroencephalogram (EEG) measures electrical activity in the brain neocortex (brain waves)
 - o Persistent Vegetative State: no neocortex brain waves can be found but the brain stem still functioning and stimulating the heart and lungs (1988 -10,000 patients with permanent loss of consciousness but maintained by tubal feedings). Is the "person" still there or not?
 - o "Residual neocortical function" can still be present without indicating any hope of a return to consciousness
 - o "Locked in" syndrome
 - o Midbrain dies (stroke or cerebral arterial aneurysm ruptures)
 - o Damage to midbrain prevents the cortex from communicating with the rest of the body
 - o Presently, when the neocortex and midbrain die, but the brain stem functions, then the person is legally alive - thus increasing number of people with a permanent loss of consciousness (PVS) due to life support systems that arrest the natural dying process
 - o Are Anencephalic infants alive? Are they a person? They are alive, but only the brain stem exists, therefore they die very quickly after death. Current legal definitions of life consider these infants alive and subject to legal protection since their brain stems are functioning (this prevents harvesting their organs since this would kill them)
 - o When the neocortex dies, the person cannot be revived - therefore, is the person dead?
 - o Positron Emission Tomographic (PET) scans currently can distinguish between unconscious patients; locked in patients; and patients with a dead cerebral cortex (Pulsed Doppler Ultrasound (PDU) is cheaper to administer and measures carotid artery blood flow, reliably determining if there is cortex brain death or not (still legal issues))
- h. Bottom line: this question is very difficult to answer in many cases and does not lend itself to an easy answer either Biblically or physically in many cases

Recommended References:

1. *"Making Biblical Decisions," Franklin E. Payne, Jr., M.D., 1989*
2. *"Biblical Healing for Modern Medicine," Franklin E. Payne, Jr., M.D., 1993*
3. *"Between Life and Death - The Life-Support Dilemma," Dr. Kenneth E. Schemmer, M.D., 1988*
4. *"Matters of Life and Death," Francis J. Beckwith and Norman L. Geisler, 1991*
5. *"Medical Ethics - Principles, Persons, and Problems," John M. Frame, 1988*
6. *"The New Medicine," Nigel M. de S. Cameron, 1991*