

It's Illegal to Die of Old Age

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One of the biggest surprises of my medical career came when I submitted a death certificate on one of my patients back in the early 1970's. That's when I found out that it was illegal to die of old age in California. (Actually it has been illegal to die of old age anywhere in the USA for the past 56 years, but I didn't know it back then.)

I was working on the Hoopa Valley Indian Reservation in Humboldt County, California at the time and one of the elders in the community had died peacefully at home. He was in his late 80's. He had acquired a medley of medical conditions common to his age, but none of them were lethal. It was his and my impression, and the family's, that his body had simply worn out and that he was ready to move on and leave it behind. He didn't make much fuss over it. He just gradually lost interest in eating and drinking. Finding a quiet place to rest in peace, protected by his family, he had died in well-documented perfect biochemical balance.

I dutifully tendered the required Certificate of Death to the county recorder and was quite taken aback when it returned with a note that "Old Age" was not a medically acceptable cause of death. I would have to come up with some other diagnosis, something more pathologic, to justify my patient's demise. And, no, "The Dwindles" wouldn't work either. Nor would "Inanition." In all honesty, I couldn't come up with any other reasonable diagnosis, so by law the case was turned over to the county coroner as the cause of death had become by definition "Unknown." He called me and we spent some time reviewing the patient's office notes together. I found an entry that mentioned treatment for mild to moderate high blood pressure in the distant past. His more recent office vitals had been within normal limits. As I recall, we agreed that "probable hypertensive heart disease" might be used as the cause of death to solve this administrative dilemma. And so it was. But something about this process has bothered me ever since.

It turns out that as a country we eliminated dying of old age back in 1951 when a federal Public Health Conference on Records and Statistics standardized causes of death throughout the nation and defined 130 acceptable diagnostic causative conditions. Old age was specifically omitted. Some of you may remember 1951, the year that nuclear power was first used to generate electricity. Penicillin and streptomycin were successfully produced in adequate supply to serve all mankind. "I Love Lucy" and "Captain Video" were tops, and CBS broadcast the first color TV program. My wife had her very first birthday party. It was a great year. Dying from potentially curable diseases was 'in.' Dying from old age was 'out.' Gathering important scientific data was 'in.' Gathering imprecise immeasurable impressions of the various aspects of inevitable mortality was 'out.' The World Health Organization, impressed by our nation's success in conquering old age as a cause of death, soon adopted this same policy, thus making it essentially impossible to die of old age anywhere in the civilized world.

As you can see, this presents the medical profession with some significant problems. First of all, it just isn't true. People do die of old age. No one has lived past the age of 122.5 in recorded history. The biologic phenomenon of apoptosis (apo-ptosis), i.e. genetically programmed cell death, is now well documented. In 1965 Dr. Leonard Hayflick discovered that human cells stop dividing after a set number of mitoses. The length of the telomere, which shortens with each division, determines the number of remaining cell divisions. Normal human fetal cells in cell culture will divide between 40 and 60 times, after which they become senescent and are unable to reproduce. The number of times a

given cell population can divide before senescence is called the Hayflick limit. Human cells are not capable of immortality. Supercentenarians die as their bodies wear out.

A second problem is that this artificial exclusion of the aging process from our cause-of-death statistical database leads to significant distortion of the data. Since all deaths have to be secondary to a pathologically defined condition present on a state-supported ICD-10 shortlist, there's a natural tendency to squeeze all deaths into these categories. Thus we find a 107 year-old man from Eureka dying of "heart disease" in 2006. I discussed this issue with Frank Jäger, Humboldt County Coroner, and confirmed that this phenomenon of assigning a 'heart disease' etiology to an otherwise 'undetermined' cause of death in the elderly is a recurrent and predictable consequence of the current national policy. This tends both to inflate the statistics for heart disease, which not surprisingly is the leading cause of death in the United States, and to minimize public cognizance and assimilation of another major cause of death, namely the aging process itself.

Since the data generated by death certificates are used "to determine which medical conditions receive research and development funding, to set public health goals, and to measure health status...ⁱ", this current policy leads to a great deal of the nation's limited health care research budget being directed toward 'diseases on the list', and fewer resources and attention being directed toward the aging process which may, in fact, be causative to many of those listed conditions.

If you find this confusing, consider the totally fictitious and rather silly proposition that HIV, the AIDS virus, doesn't kill people. It can be argued that HIV is not the cause of death. Pneumocystis carinii and toxoplasmosis kill. Cryptococcal meningitis kills. Kaposi's sarcoma kills. HIV doesn't kill, per se. It seems that this same logic is being applied within the current cause-of-death system, namely that Old Age doesn't kill. Degenerative neurological diseases kill. Degenerative vascular disease kills. Apoptosis kills. But Old Age? Naaah.

A third major effect of this institutional tendency to ignore aging as a natural cause of death stems from the psychosocial milieu that this attitude engenders. By not acknowledging the natural course of life, we define death and dying as unnatural pathologic processes. We weave the illusion that given the right vitamins and yoga practices, the right mantras and medications, the right doctors and hospitals and enough money, we can indefinitely avoid this potentially curable condition. This sets up the health care system for infinite failure in the eyes of those it serves. It breeds deferral of dealing with end-of-life issues until one's final breaths. It propagates fear of dying and the subsequent denial and isolation attendant upon that worldview. It modifies family behavior from that of supporting a natural transition to one of waging war on disease and then dealing with the inevitable sense of defeat and failure when death occurs.

It's time we move on from the currently embraced 1951 mentality surrounding death. It's time to put "Old Age" back on the books and into the research arena as one of the essential causes of the physical body's demise. Maybe if we gave it a sophisticated title it would be more acceptable, like "Ordinary Legitimate Death - Apoptosis, Genetically Encoded." Then we could just use the acronym.

ⁱ Physician's Handbook on Medical Certification of Death, 2003 Revision, DHHS Publication No. (PHS) 2003-1110, pg 1.