

MS4-0082

HOW IS THE DEATH OF DOCTOR CLARK TO BE UNDERSTOOD

Eric J. Cassell, M.D., F.A.C.P.  
Cornell University Medical College  
New York, New York

Supported in part by a Sustained Development Award for Ethics and Values in Science and Technology (NSF OSS 80-18086) from the National Science Foundation and the National Endowment for the Humanities and by the Commonwealth Fund.

## Understanding The Death of Barney Clark

### Introduction.

The impact of any death cannot be discussed in some global, overarching manner, but must be viewed from a number of different perspectives. The failure to keep these frameworks of reference separate in thinking about death and the care of the dying leads to much confusion. Consideration must be given to the dying body, the person who is dying, the two person relationships, if any, of which the dying person is a part, the patient's family, the community, and sometimes -- as in the case of Barney Clark -- the nation and the world at large.

Each of these levels on which a death has an impact is distinctly separate from the others, and each -- despite their obvious and necessary inter-relationships -- requires different information and kinds of understanding in order to act effectively. The death of Barney Clark illuminates each point I have made. Despite the seeming abstractness of this approach to understanding the care of the dying and the impact of a death, the death of Barney Clark makes clear the very practical consequences of their disregard and of our ignorance in their terms.

Before going further, I believe it is necessary to make it clear where I stand in the regard to the artificial heart. There is no question that the same amount of money that is being used to produce and implant the artificial heart could improve the health of many more individuals if it were employed in a program of preventive services. But that, and many other objections that are raised to the advance of high technology are, to me, besides the point.

### Understanding the Death of Barney Clark

Technology advances whether one agrees or not. One can turn aside or join, but as has been frequently noted, technology has its own imperative. Personally, I enjoy it. However, it seems reasonable that a new advance like the artificial heart, as discontinuous from previous capabilities as it is, should not be deployed in technological or scholarly isolation, so I sincerely applaud the openness of the Utah team, and their willingness to explore so many issues connected to the device.

Unfortunately, when new technologies are developed, the focus of intellectual attention comes to be almost exclusively the technology itself rather than its impact on the world around. For example, the artificial heart is implanted to avert a patient's death. But despite the attention death or its avoidance receive, whether the patient lives or dies may turn out to be only one of the fundamental issues raised by the implantation of the heart. Consideration of problems surrounding the care of the dying patient, or of death itself -- such as the levels I noted and on which I will be expanding -- require as much innovative thinking, research and development as the heart implant itself. Perhaps the time has come to require an "impact statement" before radically new technologies such as this are further implemented in order to prepare the society for the widespread effects of the new advance.

#### The Body.

Although medicine concerns itself with the human body, its knowledge and its methodologies are most often directed at individual organs or subordinate

### Understanding the Death of Barney Clark

levels of organization such as a cells or even molecules. Except in the minds and actions of individual physicians responsible for patient care, rarely is this biological information integrated into knowledge about whole bodies. Put another way, bodily function, or even single organ function is not frequently viewed as a whole. This deficiency of understanding has had little adverse effect in the development of artificial organs before the artificial heart, because despite the name, organs were not being replicated, biological functions were. For example artificial blood is not "blood" at all; it is artificial oxygen carrying capacity. Blood, as we all know, has many other functions besides oxygen transport. Similarly the artificial hip is not a hip, it is not even a joint, it is merely the function of articulation. Joints also have tendons, muscles and capsules. Even the artificial kidney merely replaces one function of the kidney -- a permeable membrane in an exchange bath -- the natural kidney performs other tasks as well. Generally speaking, then, success has followed where a function has been replaced.

In listening to the manner in which people, including doctors, talk about "artificial organs", one might come away with the belief that all the organs just sit there "doing their own thing" and from that concert of individual actions, the function of the whole organism occurs. I was led to believe that the same viewpoint was (at least initially) held by the Utah team, because when Dr. Clark died, it was reported that his artificial heart had worked fine, but that his kidneys and his lungs did not hold up because they were so diseased prior to the implant. While I have no question that Barney Clark's kidneys and lungs were impaired after his long history of congestive heart failure, the

