

## Clinical Incoherence about Persons: The Problem of the Persistent Vegetative State

A provocative and disturbing article by Payne and colleagues (1) in this issue reports on the attitudes and beliefs of a panel of neurologists and medical directors of nursing homes about the persistent vegetative state (PVS). The authors chose to survey these physicians because they believed them to be especially knowledgeable. The results are surprising, contradictory, and indicative of confusion about what most of us believe is basic to being a person. A person is a complex being, more of a trajectory through time than an object, that includes a past and a believed-in future combined with society, culture, family, roles, work, relationships (with others, self, and body), a private life, and a transcendent dimension (2).

The PVS is characterized by lack of awareness and preserved sleep-wake cycles; it is physiologically similar to anencephaly. Payne and colleagues (1) point out that physiologic and anatomical studies do not support the capacity for subjective experience in these patients. Yet "substantial minorities" of both neurologists and medical directors believe that these patients "experience pain, thirst, and hunger; are aware of self and environment; and are made more comfortable by intravenous fluids and tube feedings." Experience is an ambiguous word. In terms of pain, it might mean to undergo, as in receiving a nociceptive stimulus. More often, it implies a cognitive response to a stimulus, by which it is assigned meaning as a specific kind of pain from a specific something. Simple nociceptive responses exist far down the phylogenetic scale and do not seem to be what the surveyed physicians meant. The cognitive function and assignment of meaning usually associated with experience are characteristic of persons and seem to require a generally intact nervous system. Neurologists know these things better than I do, so these discordant views are probably not the result of ignorance of neurophysiology. Rather, one can speculate that anyone who looks at these patients, whose eyes may be open when awake, will see someone who looks so much like an "intact" person that it is difficult to imagine their lack of cognitive function. Appearance overrides scientific knowledge—not a rare phenomenon.

There are more confusions. Nearly all of the surveyed physicians believe that patients in the PVS would be better off dead, and almost half of the

physicians polled think that these patients are dead (1). Yet many (we are not told whether this group includes any member of the half who think that the patients are dead) believe that patients in the PVS who have diabetes, hypertension, or infections should be treated for these diseases. Although half of the respondents believe that these patients are already dead, four fifths believe that it would be unethical to give them a lethal injection. Most of the responders, on the other hand, think that it would be ethical to use the organs of these patients for transplantation. This is odd, because doing so would cause the patient's death, and it is illegal to harvest organs from the living.

It is possible, but unlikely, that these inconsistencies arose from the nature of the questionnaire. Extensive experience in discussing these and similar issues with physicians makes me think it more likely that the confusions exist in the responders. The problem arises from two separate sources, I believe. The first is the decision-making model that has become common in medicine, and the second is medical ignorance of what a person is.

One of the most important areas of medical progress in recent decades has been improvement in the quality of information that is available about diseases and pathophysiology. This progress has led to the call for evidence-based medicine that no longer depends only on the opinions of authorities but also rests firmly on the results of appropriate research (3). The results of modern clinical research have sharpened understanding of the goals of diagnosis and treatment and have provided solid underpinning for decisions about the treatment of diseases. Another advance of our time has come from the field of clinical epidemiology; the methods of this field have added precision to the thinking of physicians as they evaluate evidence that bears on their actions. Between the evidence on which it is based and the analytic methods it uses, modern decision making has become a sophisticated tool.

Caution is necessary, however. In calling the mental function that precedes action "decision making" rather than calling it by its more traditional name, "judgment," several features of judgment seem to be overlooked. One is that judgment, by definition, is always about particular individual situations, but scientific evidence is always about gen-

eralities. This means that the changeability and uncertainty that characterize patients in particular clinical circumstances may be poorly represented in decision-making methods. It might appear that adequate decisions can be solely about limited aspects of a more complex problem—this antibiotic, that dose of insulin, this degree of respiratory support—but this is an illusion. A decision about a part is always part of a judgment about the whole, because whatever affects the part affects the whole. In medicine, that whole is the whole patient.

In a related problem, the methods of clinical epidemiology and decision analysis seem to promise a mathematical precision free of the values and emotions associated with the fact that both patients and physicians are persons. For clinicians, however, entanglement with values is inevitable because some things are more important than others. As clinicians, we want to serve the best interests of the patient, attitude counts, and we and our patients have numerous concerns in all but the most trivial clinical judgments. "Important," "interests," "attitude," and "concerns" are words in the vocabulary of values. In fact, some of the confusions that surface in the survey of Payne and colleagues (1) result from differences in the responders' values, not their ignorance of the pathophysiology of the PVS. Finally, a pervasive fear of error and concern with how things will look haunt nearly all of clinicians' actions throughout their working lives. This tells us that they are emotionally involved in their judgments and with their patients. Especially in circumstances like the PVS, when the community in which clinicians work may be sharply divided in its opinions about the correct thing to do. Medical power has gotten far ahead of the public consensus about how it should be exercised.

If judgments are really about patients and not just their parts, it follows that clinicians should know as much as is relevant about their patients as a whole—sick or well persons—as about their body parts. Otherwise, clinical decision making will be flawed by inadequate information. This is one of the most important lessons that this era of evidence-based medicine and clinical epidemiology teaches. In fact, we do not know very much about persons in comparison with what we know about kidneys, not even what is most important to know. Most people know much about persons as, for example, friends, spouses, or politicians, but not from a medical perspective. Further, physicians are not nearly as expert in thinking about persons as in thinking about science. These things are not taught in medical school

or during residency training. Who would teach them? What knowledge physicians have is usually gained through experience in everyday life and by working with patients. Such experience was almost the only source of most physicians' knowledge about illness until the last century, when the scientific era put medicine on a sound factual basis.

Only in this era have such questions as these have arisen for any class of patients. The idea of resuscitation as a practical matter is only about 150 years old. The patient (rather than the disease) as the primary focus of medicine's concern goes back only about 70 years, and keeping such patients as those in the PVS alive first became realistic fewer than 50 years ago. I believe that if you survey your friends with the questions of Payne and colleagues, you will find the same confusions. How are these issues to be resolved? There cannot be a "science of persons" in the same sense that we have other medical sciences, marked by precise definition and measurement. Twenty-five hundred years ago, Plato called for a "science of practical deliberation" to balance the counting and measuring of what is presently called "natural science" (4). The need is as great now as it was in Plato's day, and the problem remains unresolved. The care of patients who present such questions as those asked by Payne and colleagues is our responsibility, yet we have not been trained to think clearly about these dilemmas. Payne and colleagues' vexing findings point to the need for us as physicians to clarify our thinking through reading, discussion, and teaching until our thoughts, judgments, and clinical decisions are coherent.

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