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Psychology

How dead is dead?

Sometimes, those who have died seem more alive than those who have not

Aug 20th 2011 | from the print edition

IN GENERAL, people are pretty good at differentiating between the quick and the dead. Modern medicine, however, has created a third option, the persistent vegetative state. People in such a state have serious brain damage as a result of an accident or stroke. This often means they have no hope of regaining consciousness. Yet because parts of their brains that run activities such as breathing are intact, their vital functions can be sustained indefinitely.

When, if ever, to withdraw medical support from such people, and thus let them die, is always a traumatic decision. It depends in part, though, on how the fully alive view the mental capacities of the vegetative—an area that has not been investigated much.

To fill that gap Kurt Gray of the University of Maryland, and Annie Knickman and Dan Wegner of Harvard University, conducted an experiment designed to ascertain just how people perceive those in a persistent vegetative state. What they found astonished them.

They first asked 201 people stopped in public in New York and New England to answer questions after reading one of three short stories. In all three, a man called David was involved in a car accident and suffered serious injuries. In one, he recovered fully. In another, he died. In the third, his entire brain was destroyed except for one part that kept him breathing. Although he was technically alive, he would never again wake up.

After reading one of these stories, chosen at random, each participant was asked to rate David's mental capacities, including whether he could influence the outcome of events, know right from wrong, remember incidents from his life, be aware of his environment, possess a personality and have emotions. Participants used a seven-point scale to make these ratings, where 3 indicated that they strongly agreed that he could do such things, 0 indicated that they neither agreed nor disagreed, and -3 indicated that they strongly disagreed.

The results, reported in *Cognition*, were that the fully recovered David rated an average of 1.77 and the dead David -0.29. That score for the dead David was surprising enough, suggesting as it did a considerable amount of mental acuity in the dead. What was extraordinary, though, was the result for the vegetative David: -1.73. In the view of the average New Yorker or New Englander, the vegetative David was more dead than the version who was dead.

The researchers' first hypothesis to explain this weird observation was that participants were seeing less mind in the vegetative than in the dead because they were focusing on the inert body of the individual hooked up to a life-support system. To investigate that, they ran a follow-up experiment which had two different descriptions of the dead David. One said he had simply passed away. The other directed the participant's attention to the corpse. It read, "After being embalmed at the morgue, he was buried in the local cemetery. David now lies in a coffin underground." No ambiguity there. In this follow-up study participants were also asked to rate how religious they were.

Once again, the vegetative David was seen to have less mind than the David who had "passed away". This was equally true, regardless of how religious a participant said he was. However, ratings of the dead David's mind in the story in which his corpse was embalmed and buried varied with the participant's religiosity.

Irreligious participants gave the buried corpse about the same mental ratings as the vegetative patient (-1.51 and -1.64 respectively). Religious participants, however, continued to ascribe less mind to the irretrievably unconscious David than they did to his buried corpse (-1.57 and 0.59).

That those who believe in an afterlife ascribe mental acuity to the dead is hardly surprising. That those who do not are inclined to do so unless heavily prompted not to is curious indeed.

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