FEATURE: REPORT

Deadly serious: the definition of death in New Zealand

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It would appear there is dissociation between the medical and legal dealings of death in New Zealand. We have no statutory definition of death, and the legal profession seems content for medical practitioners and their regulatory bodies to define the concept. Nevertheless at times medicine and law must coincide, giving a necessity for a legal definition of death. This essay will examine this current 'definition' of death in New Zealand and its possible alternatives.

As above, there is no statutory definition of death in New Zealand. The closest statement is in the Human Tissue Act 2008 which states that tissue may not be removed from a human body unless a 'qualified person is satisfied... that the individual concerned is dead'. This is a vague definition showing that the law defers to medicine for its definition of death. This deferral system was first proposed in 1972, when a high court judge the Hon. Mr Justice DS Beattie submitted that doctors should attempt to agree among themselves on what constitutes death, and accord this with what the everyday man would agree with.²

The lack of a statutory definition of death and the proposal that doctors should define it has resulted in death being legally defined by case law. The relevant case is Auckland Area Health Board v Attorney-General [1992] 8 CRNZ 634 (HC) involving Mr L, who suffered from an aggressive form of Guillain-Barré Syndrome. Mr L's disease progressed to the extent that he was deaf, possibly blind, and unable to breathe without mechanical support.³ Due to the severity of his condition, the physicians charged with Mr L's care, along with Mrs L, sought legal declaration that withdrawing the life support of Mr L would not be met with criminal prosecution. The motion was upheld and a declaration was given by Justice Thomas J on the basis that "A doctor acting responsibly and in accordance with good medical practice recognised and approved as such in the medical profession, would not be liable to any criminal sanction based upon the application of s 151(1) Crimes Act 1961. He or she would have acted with lawful excuse."

The lawful excuse referred to above is derived from an ethical argument holding that removing Mr L's life support does not kill Mr L; his disease does. Instead, withdrawing life support (a humane, gradual process) ceases to prolong his life and withholds a futile medical treatment. The former quote also shows that "Good medical practice, which is recognised and approved as such in the medical profession" is what forms the basis for defining who is dead in New Zealand.³ The Judge more clearly shows that the courts

defer to the medical profession in this regard when he says:"...the medical community... has preferred the concept of what is called "brain death"... While I understand that this definition has not been formally adopted in New Zealand, it is widely accepted throughout the medical profession..."³ So despite Mr L not being pronounced 'dead' in this case, (instead being referred to as the "living dead" for reasons discussed later), the judge and the lawyers in the trial measure his standard of life by the concept of whole brain-death as is accepted by medical practitioners, and thus the law in New Zealand.^{3,4}

The human brain can be simply considered as comprising of two parts: The higher brain (cerebrum and cerebellum) giving conscious thought and sensory perception, and the lower brain (brainstem) which regulates unconscious functions such as breathing, heart rate and wakefulness. According to the whole-brain definition of death, "death is the irreversible cessation of functioning of the entire brain, including the brainstem". There are many advantages to this approach that have led to its resounding popularity. Firstly, the whole-brain approach was not a revolutionary change from the old cardio-pulmonary definition (cessation of heart-beat and breathing) of death because when the heart and lungs cease to function, so will the brain, and vice versa. So, in some ways, the change of definition merely cemented the changing views that the brain is the most important organ in the body and the integrator of all functions.

Because of the above points, this definition change was highly amenable to the common public and this helped its dissemination.⁵ The standard also has practical advantages in that it can be clinically tested for, and allows organ transplantation of viable tissue, as circulation and respiration can be maintained by external means after brain death. This definition also enables expensive life-support treatment to be switched off in cases of total brain failure.⁵

Proponents of this theory argue that these practical benefits are merely coincidences occurring with a natural biological death. Others say these pragmatic factors are used as a means of justifying an immoral concept. A disadvantage of this definition is that it also follows that someone with only a functioning brainstem is considered alive in New Zealand. This creates an ethical dilemma for switching off the life-support to these patients, as in a legal sense it is tantamount to killing them. The latter point is relevant to the unique case involving Mr L as his brainstem was functional, but he was unable to regulate is own heart rate or breathing because all of the nerves coming out of his brainstem and spinal cord were defunct.

Hence, in the case he is referred to as the 'living dead' and the judge recognises that the only difference between his condition and the standard definition of death is "a matter of medical description". His condition was therefore taken as equal to that of death and the outcome of his case was sufficient to define the whole-brain standard of death for subsequent cases in New Zealand.

Many other western countries use the whole-brain standard to define death, including the USA. However there it is used in tandem with the classical cardio-respiratory definition of death saying: "An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards." Why have the USA chosen to include this classical definition in their federal law? At the time of enactment, it was a way of pleasing conservatives and progressives alike, synergising a contemporary and classical definition. Their definition also came into law at a time when cardio-pulmonary resuscitation (CPR) and mechanical means of sustaining life were being perfected, meaning for the first time in history, a stopped heart didn't mean certain death. Now however, there is wide acceptance of brain death. So why has the USA retained their dual definition when a simpler brain oriented definition would suffice?

The answer to this question lies in the practice of 'donation after cardiac death' (DCD). DCD is organ donation after confirmed cardiopulmonary death, and occurs when patients have previously agreed to be taken off life-support. These patients are taken to an operating theatre, where life-support is withdrawn, leading to cardiac arrest. The doctors then wait two minutes, and declare the patient dead on the basis of the cardiopulmonary standard. This allows for organ donation to occur rapidly after death, which could not occur with the whole brain standard which requires extensive confirmatory tests that may take hours after death occurs. This use of the legal definition of death in the USA has lead to an increased ability to meet the demand for donor organs, something the New Zealand medical system struggles with.

Similarly to New Zealand, the United Kingdom definition of death is by case law, but their definition is that of brainstem death.⁸ This has the practical advantage of requiring fewer tests to certify death. It is also, for all intents and purposes, the same as the whole-brain definition because the brainstem contains the reticular activating system. This piece of neuroanatomy switches on our state of consciousness and hence if it is damaged, the higher brain cannot function to maintain consciousness anyway.

Aside from these well-accepted definitions, the most progressive approach to defining death is the concept of higher brain death, which is favoured by some academics. Higher brain death is given as the irreversible cessation of the capacity for consciousness. It recognises the human brain as having the ultimate function of enabling consciousness, not the regulation of body function. Academics in favour of this definition like to think of death in terms of "a complete change in the status of a living entity characterized by the irretrievable loss of those characteristics that are essentially significant to it". Thus it is distinguished from other definitions, because it implies that regulation of bodily functions does not necessitate life, as it is not unique or especially significant to humans. This regulation merely provides a vehicle for the maintenance of our consciousness.

This definition has not been put into active use anywhere, and remains more of a philosophical discussion.⁵ If it were to come into practice, there are aspects that would require clarification. Especially unclear would be the time after conception at which humans become 'alive'. This issue arises because under the higher brain definition, life would necessitate consciousness and humans develop this well after conception and possibly after we are born.¹⁰ This definition may also lead to difficulties in criminal law for it could be sympathetically read as splitting the human into two 'beings' – meaning that prosecution for removing the consciousness of an individual would carry a higher sentence than the destruction of their body or capacity for bodily function.

Philosophical discussions aside, New Zealand's legal definition of death is sound. It is the definition best accepted by medical professionals working here, and is comparable to other international standards. The lack of a statutory definition here is also beneficial because it allows for constant debate of the definition in court on a case-by-case basis. This definition will therefore serve us well now and into the future by allowing for change as societies' views on death inevitably shift as they have throughout history.

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