
Editorial

Death

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It is now so widely accepted in Anglo-European society that medical criteria of brain death are proper criteria of death that it is surprising – and salutary – for us to be reminded that the matter is by no means universally agreed. In this issue of the journal Dr Bo Rix reports (1) on the recommendation of the Danish Council of Ethics (DCE) that contemporary medical criteria for brain death should *not* be accepted as criteria for death, though they should be accepted as criteria for the irreversible *onset* of the death process (2). The Danish Council's position is vigorously criticised and rejected in two commentaries on Dr Rix's paper, one by the neurologist Dr Christopher Pallis, the other by the philosopher Dr David Lamb.

The DCE's recommendations are motivated by the admirable desire for all medical criteria for death to correspond to ordinary people's concept of death – to their notions of what death is. But don't medical criteria for brain death correspond to ordinary people's concept of death? Although the DCE's diffuse discussion of the ordinary concept of death is somewhat unclear, what *seems* to emerge from it is that ordinary people see death as being the cessation of existence of a *person* and that the moral concern of persons for persons is not reflected in the scientific concept of death to which contemporary medical criteria for brain death correspond (2).

The scientific concept of death is, according to the DCE, not concerned with persons but rather with the (permanent) cessation of the integrated functioning of a biological organism: 'in science death is not regarded as a person's death but rather as the cessation of the life functions of a biological organism'. Differentiating between the total death of an organism – death of every living cell in an organism – and death of an 'organism as a functioning unit', the DCE explains that brain function and brainstem function is a necessary condition for consciousness and for respiratory and circulatory function and that therefore 'on a solely scientific viewpoint "total and irreversible cessation of brain function could be claimed as being equivalent to the death of the organism as a whole"' (2).

Is any such dichotomy between the 'scientific' and the 'ordinary' concept of death justified? There undoubtedly is a distinction to be made between the death of a person and the death of a biological organism

– for all sorts of biological organisms can die that are not persons. Whether or not this distinction marks a conceptual distinction or a difference in the scope of application of a single concept (ie a single concept of death but applied on the one hand to biological organisms in general and on the other hand to persons) either way the criteria for determining death may be different in the two sorts of case. But does this distinction between the death of biological organisms and the death of persons reflect and correspond to a distinction between scientific and ordinary concepts of death? Surely not. Ordinary people undoubtedly use and understand the concept of death of a rose bush, or a butterfly or a cow without in any way considering such deaths to be deaths of persons. Similarly scientists while they may be concerned with the concept of death of biological organisms surely also use and understand the concept of death of persons, and more specifically the concept of death of human persons (indeed the World Medical Association's Declaration of Sydney on death explicitly affirms that clinical interest lies 'in the fate of a person' (5)). Thus while the DCE is correct to distinguish between death of biological organisms and death of persons, it is surely mistaken to suggest that one is the ordinary concept of death, the other the scientific concept of death. Both are used and differentiated in ordinary discourse and both are used and differentiated in scientific discourse.

The DCE is surely also correct to emphasise that in the case of humans the death of persons – of human persons – is of profound moral importance and that therefore people generally are very concerned that the criteria of death reflect this importance and provide reliably accurate methods for determining the death of persons. In this regard the traditional criteria of death – cessation of respiration and heart function – have an enormous advantage over brain death criteria; they are easily detectable by ordinary people, who can therefore confirm directly that a person is dead whereas brain death criteria, used in cases where a human being is maintained on artificial ventilation, are far less detectable or even understandable by the ordinary non-medical person, and therefore subject to far greater suspicion.

But to acknowledge such understandable public suspicion of arcane medical criteria and techniques for

diagnosing death in certain sorts of case is neither to acknowledge that a different concept of death is being used by the medical profession from that used by the public, nor to provide grounds for rejecting those medical criteria and techniques.

So far as the concept is concerned even if it were true, as the DCE claims, that ordinary people are mainly concerned with death of persons, nonetheless and perhaps paradoxically, contemporary medical brain death criteria should be entirely reassuring to them. For whatever one's concept of a person is, one feature widely acknowledged as *necessary* for being a person is a capacity – or at least the potential for a capacity – for consciousness. It follows that when a person has permanently lost the capacity for consciousness – as occurs in brain death – the person no longer exists, the person is dead.

Against this the DCE provides an important but surely mistaken argument. Rejecting (some) everyday concepts of death based on dualism (concepts according to which the spiritual soul leaves the physical body at death) the DCE argues as follows: 'If one assumes that a human person is a whole and a unity of consciousness and body (mind and body) – that the personal identity is also connected to the body – it is natural to say that the death process has not finished as long as the respiration, heart action, blood circulation, etc still is going on' (though the DCE is clear that 'when cessation of brain function is total and irreversible the death process has irrevocably begun'). But it surely does *not* follow from the fact that a person is a unity of consciousness and body that a person cannot be dead (ie that his or her 'death process' has not finished) until respiration, circulation and 'etc' has ceased. On the contrary, it is elementary that if *y* is (necessarily) a unity of *x* and *z* then if either *x* or *z* has ceased to exist then *y* has ceased to exist. Thus if a human person is necessarily a unity of consciousness and body, and if consciousness (and a capacity and potential for consciousness) has ceased to exist, then the human person has ceased to exist. Since it is a key feature of contemporary medical criteria for brain death – whether whole brain death criteria or brainstem death criteria – that the capacity for consciousness is excluded by those criteria it follows that it is not possible for a person to continue to exist in a human being who is brain dead according to medical brain death criteria.

The problem is surely not, *pace* the DCE, that the public have a different concept of death from the scientists, but rather that both groups tend to feel more secure if the operational criteria for diagnosing human death encompass *both* the death of the human person *and* the death of the human organism functioning as an integrated whole. The traditional cardio-respiratory criteria of death have performed this dual function. But there seems no doubt, again *pace* the DCE, that contemporary criteria for brain death also do so, for permanent cessation of function of the brainstem (and

of course of the whole brain) is sufficient *both* for death of a human person given that a capacity for consciousness is necessary for the existence of a human person and that a functioning brain stem is necessary for such a capacity *and* for death of a human organism functioning as an integrated whole, given that brainstem function is necessary for the control and integration of various crucial biological functions including respiration and hence all the respiration-dependent functions of the body.

Nonetheless it is important to realise that the criteria for brain death are a compromise between extreme versions of the two concerns encompassed. On the one hand, so far as death of the biological organism as an integrated whole is concerned, the compromise is with a concept of death as complete *disintegration* of the human organism's biological functioning, with all living components dead or at least *totally* disintegrated and dissociated from each other; compared to this extreme standard the traditional cardio-pulmonary criteria are of course also a compromise, but less so than the brain death criteria.

On the other hand, brain death criteria are also a compromise with the concept of death understood as cessation of personal existence, for brain death criteria will classify as alive some humans who are dead as persons. The most important clinical example is permanent vegetative state (PVS), for given that PVS involves permanent loss of consciousness and of the capacity and potential for consciousness, and given as above that a capacity for consciousness is a necessary condition for being a person, then a human being in PVS *can not be a person*; yet according to brain death criteria (whether brainstem death criteria or whole brain criteria) that same human being in PVS is unequivocally alive.

For many it is precisely *because* contemporary brain death criteria – and especially brainstem death criteria – are sufficient for the determination both of the death of a human biological organism functioning as an integrated whole and of the death of a human person that they are so desirable as practical criteria, to be used wherever relevant in medical practice and to be supported for this purpose by public policy.

References

- (1) Rix B A. Danish ethics council rejects brain death as the criterion of death. *Journal of medical ethics* 1990; 16:5–7.
- (2) Danish Council of Ethics. *Danish criteria – a report*. Copenhagen. 1989. (Obtainable free from the Danish Council of Ethics, Ravnsborggade 2–4, Dk-2200 Copenhagen N, Denmark).
- (3) Pallis C. Return to Elsinore. *Journal of medical ethics* 1990; 16:10–13.
- (4) Lamb D. Wanting it both ways. *Journal of medical ethics* 1990; 16:8–9.
- (5) World Medical Association. The Declaration of Sydney. In: *Philosophy and practice of medical ethics*. London: British Medical Association, 1988: 106–107.