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## **Pluralism in the determination of death** Gonzalo Díaz-Cobacho\* and Alberto Molina-Pérez



Since the neurological criterion of death was established in medical practice in the 1960s, there has been a debate in the academic world about its scientific and philosophical validity, its ethical acceptability, and its political appropriateness. Among the many and varied proposals for revising the criteria for human death, we will focus on those that advocate allowing people to choose their own definition and criteria for death within a range of reasonable or tolerable alternatives. These proposals can be categorized under the rubric of pluralism in the determination of death. In this article, we will outline the main proposals and their rationales and provide a current overview of the state of the controversy.

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#### Introduction

Advances in medical technology in the 1960s made it possible to sustain people in intensive care, despite total and irreversible damage to their brain and brainstem. This led physicians to question the vital status of these individuals. In 1968, a Harvard committee proposed expanding the diagnostic criteria for death by introducing a neurological criterion for such cases [1]. Although widely accepted by the medical community, this sparked a debate, primarily within the academic community, about whether death by brain criteria should be considered as death.

Much of the debate centers on the search for the best criterion. Some advocate the existing brain criterion, while others propose alternatives that they believe are superior. A criterion for death can be considered good in at least two ways: because it is accurate, thus avoiding both false positives and false negatives, or because it is sound and acceptable from an ethical or policy perspective.

Among the public, surveys indicate a scarce knowledge and a certain reluctance to accept brain death as a valid criterion for determining death [2,3]. This reluctance may stem from the fact that brain-dead individuals continue to breathe (through mechanical ventilation), have a beating heart, and maintain a warm body. In some cases, such as Aaron Halberstam [4] and Jahi McMath [5], relatives oppose the determination of death by neurologic criteria and request that their loved one continues to be considered alive [6].

In most jurisdictions, physicians hold the legal prerogative to determine an individual's death. For instance, in the United States, the Uniform Death Determination Act specifies that death can be declared, in accordance with accepted medical standards, when there is either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brainstem. The choice between these two criteria for a particular individual rests with the attending physician. Consequently, people have no say in the criteria used to declare their own or their loved ones' deaths; it is imposed upon them, regardless of their values, beliefs, and preferences.

### Death as a matter of choice

Should individuals have a say in determining the criteria for declaring their own or their loved ones' deaths? This possibility exists in Japan and in some states in the United States, notably in New Jersey, where religious influence has played a significant role in shaping these policies [7,8]. More recently, cases challenging the neurological criterion for death determination have emerged in the United Kingdom [9].

This right for individuals to choose from among different criteria of death can be referred to as *pluralism in the determination of death*. It stands as an alternative to the medical imposition of the neurological criterion for determining death.

Some clarifications are in order. First, we are referring to *legal* pluralism. This means that people are *legally allowed* to choose the criteria applicable to their own or their

loved one's death, and also that this affects their vital status *in the eyes of the law*. This is about death from a legal perspective, regardless of the biological, philosophical, or any other perspectives. There are other forms of death pluralism that are often conflated: ontological or metaphysical, conceptual, and epistemological [20]. The justification for legal pluralism may be based on some other form of pluralism.

Second, only two options exist in Japan and the United States, that is, cardiorespiratory death and brain death. However, pluralism in the determination of death is not necessarily restricted to currently accepted criteria: it could encompass other theoretical options. Some have proposed a variation of the neurological criterion based on the cessation of higher-brain functions, such as the capacity for consciousness and cognition, which are constitutive of personhood and personal identity [10,11]. Others advocate low-level biological criteria, neither neurological nor cardiorespiratory, based on fundamental concepts such as homeostasis and entropy [12]. We could also imagine a policy where the choice would not be limited to a finite number of preset criteria, but open to an infinite number of self-chosen options. However, there is no record in the literature of any advocacy of this position.

Third, although they appear similar and may lead to the same measures, pluralism must be distinguished from accommodations. Seeking accommodation involves negotiation and dialog between health professionals and families with different interpretations of medical death criteria, with the aim of reconciling differences within that medical framework where ethically and technically feasible. In such cases, professionals believe that a braindead individual is actually dead, with all that this implies in practical terms, while the family believes the opposite and demands different practices. Both parties assume that there is a correct interpretation of the criteria for death, namely their own. A policy of limited conciliation, such as that recommended by the American Academy of Neurology [6], is based on the idea that the medical criteria for death are correct (and therefore that families who do not accept them are mistaken). Legal pluralism, on the other hand, does not necessarily imply or rely on the idea that one side is right. As we shall see, it can be based on the absence of consensus on what death is, or on moral or political considerations independent of beliefs and the truth of the matter, if there is any. On the issue of accommodations, see [13–16].

# Pluralism as a response to the lack of consensus on what human death is

One justification for pluralism is the absence of a single unambiguous and consensual concept or definition of human death. As Karen Gervais puts it: "Any criterion for determining death presupposes an answer to the question: What is so essentially significant to human life that its irreversible loss is death? People differ in their answers to this question" [17].

Some advocate a strong form of pluralism by claiming that biology fails to provide any clear answers to this question. For instance, Linda Emanuel argues that dying is a gradual and asymptote-like process and that life cessation can be declared within a 'bonded zone' of residual states of life, anywhere between cardiopulmonary death and persistent vegetative states [18]. One step further, Piotr Nowak and Adrian Stencel challenge a core assumption of the biological conception of death, namely that death is equivalent to the cessation of the organism [19]. By showing that theoretical biology operates with a plurality of equally valid concepts of an organism, they assert that there is no single correct answer to whether a brain-dead individual is biologically alive or dead.

Some advocate a weaker form of pluralism, suggesting that although there might be a scientifically correct criterion for determining death, this should not necessarily prevent stakeholders from choosing different criteria. Gonzalo Díaz-Cobacho and colleagues argue that, as long as the criteria for death (such as the neurological criterion) remain the subject of scientific controversy, that is, as long as there is reasonable doubt as to their validity, patients and relatives should be allowed to make an autonomous decision on whether they accept these criteria [20].

On a different note, Michael Nair-Collins distinguishes between organismic death and personal death, emphasizing that they do not always coincide [21]. While advocating a theory of biological death to scientifically determine the vital status of an organism, he simultaneously seeks a policy on personal death that would allow for nonscientific criteria.

John Lachs argues that death is not merely a matter of fact, as it involves social choices and decisions, such as those related to the costs and benefits of keeping alive those in organic decline [22]. Death is best understood as a biologically based social status whose determination is an evaluative issue mediated by both biology and social factors.

Robert Veatch and Lainie Ross also argue that declaring death is more than describing the cessation of the organism [4,23]. It involves acknowledging that "the individual is no longer with us as a member of the human community with rights such as the right not to be killed". This is a normative issue on which different stakeholders may disagree. While physicians have expertise that is crucial to determining the physiological condition of an individual, the definition of death is a

Summary of types of pluralism	Author(s)	Perspective/argument
<sup>a</sup> Legal pluralism	All	A requirement for any kind of pluralism, it must be present in all countries where a pluralistic concept in the determination of death is accepted.
Biological pluralism	Linda Emanuel, Piotr Grzegorz Nowak and Adrian Stencel, Gonzalo Díaz-Cobacho, Alberto Molina- Pérez, and David Rodríguez-Arias	Strong form: Biology fails to provide a clear answer to what constitutes human death; death is a gradual process. Weaker form: Scientifically correct criteria may exist, but stakeholders should be allowed to choose different criteria if there is scientific controversy. Differing views on the biological conception of death.
Pluralism in the light of the biological and normative bifurcation of death	John Lachs, Michael Nair-Collins, Robert M. Veatch, and Lainie Ross	Death involves social choices and decisions, influenced by biological and social factors. Declaration of death goes beyond physiological cessation; it is a normative issue rooted in religious, philosophical, and social beliefs. Physicians lack special expertise in defining death from these perspectives.
Pluralism as respect for individual autonomy	Robert M. Veatch and Lainie Ross, Ivars Neiders and Vilius Dranseika, Osamu Muramoto, Ivor Berkowitz, and Jeremy Garret	Pluralism is justified on moral grounds (individual autonomy). Individuals and relatives should have the right to choose death criteria or exercise conscientious objection for religious or moral reasons. Empirical research shows differences in public preferences for death criteria. Informed consent before the diagnosis of brain death is proposed as an option. Limiting proxy decision-making in specific cases.
Pluralism as a form of political liberalism	Syd Johnson, Masahiro Morioka, Kartina A. Choong and Mohamed Rady, Marko Stamenkovic, Michael Nair-Collins, Kristin Zeiler, and Christos Lazaridis	Pluralism is justified on political grounds (respect for plurality of values and beliefs). Cultural and religious perspectives influence views on death. Overlapping consensus, as proposed by John Rawls, is essential fo accommodating diverse perspectives within a democratic framework.

Table 1

<sup>a</sup> Legal pluralism is not only an approach but also a requirement. In any society where some kind of pluralism (biological, political, etc.) is accepted, the law must allow this type of practice.

social question rooted in religious, philosophical, and social beliefs about which physicians and other healthcare providers do not have special expertise.

#### Pluralism as respect for individual autonomy

Veatch pioneered the bioethical perspective on individual choice in defining death [24,25]. He proposed that, for pragmatic reasons, the state should choose a default definition of death (e.g. whole-brain death), but that individuals and their relatives should be allowed to exercise conscientious objection if they disagree with the default, for religious or moral reasons, as is the case with other issues [26].

Following Veatch's lead, other authors have proposed variations on the same idea, such as limiting proxy decision-making to the case of children [27], or emphasizing the principle of respect for individual autonomy [28].

Ivars Neiders and Vilius Dranseika have tested Veatch's approach with empirical research [29,30]. They found marked differences in the public's preferences regarding the determination of death. They also found that the three conceptions of death discussed in the bioethics

literature and proposed by Veatch as alternatives to choose from were preferred by a significant proportion of study participants, with the whole-brain criterion being the most frequently chosen answer. These studies provide some initial evidence to support the pluralistic solution proposed by Veatch.

Osamu Muramoto initiated a new argument, independent of Veatch's, that relies on the idea of informed consent before the diagnosis of brain death [31]. This is intended to accommodate the wishes of those who would like to express their unique preferences in the end-of-life decisions at the last moment, similar to other measures that have already been carried out, such as the Do Not Resuscitate order and the Physician Orders for Life-Sustaining Treatment.

Along these lines, Ivor Berkowitz and Jeremy Garrett have explored the legal and ethical bases for requiring consent before apnea testing to determining death. This would allow the patient's relatives to prevent the determination of death by neurological criteria by withholding consent to this test [32].

#### Pluralism as a form of political liberalism

It is not always clear whether pluralism is justified on moral grounds, based on respect for individual autonomy, or on political grounds, based on respect for the plurality of values and beliefs. One example of this is Syd Johnson's argument for allowing conscientious objections to neurological criteria [33].

In some cases, pluralism is advocated from a cultural and religious perspective. Starting from the situation in Japan, Masahiro Morioka shows that death concepts are rooted in culture; while some Westerners place the essence of what is human in self-consciousness and rationality, many Japanese place it not only in the mind but also in the body, and these different views of death deserve respect [34].

Acknowledging that British society is pluralistic, Kartina A. Choong and Mohamed Rady highlight the need for a sensitive and ethical approach to dealing with conflicts between secular and religious perspectives on death and propose a thorough parliamentary debate on the issue [35,36]. Along these lines, Stamenkovic [37] also suggests that the plurality of positions on death opens a political space for negotiation and democratic discourse.

Some authors refer to John Rawls' concept of overlapping consensus. This term underscores the importance of finding common ground among individuals with diverse and sometimes conflicting comprehensive doctrines. It aligns with the broader aim of pluralism in the determination of death, as it emphasizes the need to accommodate varying cultural, religious, and philosophical perspectives within a democratic framework. Among those authors, we can mention Michael Nair-Collins, Kristin Zeiler, and Christos Lazardis [21,38,39].

The different forms of pluralism addressed in this paper are summarized in Table 1.

#### Conclusions

Pluralism is a position that has been present almost since the beginning of the bioethical debate on the determination of death. It advocates the right of individuals to choose the definition and criteria for determining their own death or that of their family members. Although it is still a minority position, its presence seems to have increased in recent years.

Pluralism in the determination of death can be justified on scientific, moral, and/or political grounds. Supporters of the scientific justification for pluralism argue that it is based on the absence of consensus on the validity of current medical criteria, either because there is no clear biological answer or because death is not (only) a biological issue, but (also) a social construct. The moral justification is grounded in the principle of autonomy, asserting that individuals should have the right to make end-of-life decisions in accordance with their own beliefs and values, provided they do not harm others and adhere to societal ethical boundaries. The political justification, often drawing from John Rawls' theory, emphasizes the need for overlapping consensus in diverse, liberal, and democratic societies.

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#### **Declaration of Competing Interest**

The authors declare that they have no conflicts of interest.

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Zheng et al. have been responsible for an interesting Scoping Review that collects the main articles on the population's knowledge of the definition of the determination of death. This study is key in order to have a proper mental map of the public's opinion.

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• Georgetown University Press; 2016.
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This book by Veatch and Ross is key to understanding the whole problem of defining death. However, the fundamental part of it is the development of the proposal of The Conscience Clause. One of the key issues in the discussion on pluralism is the determination of death.

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The article by Nowak and Stencel is particularly interesting in that it challenges the biological idea of death. This article, therefore, does not focus on whether or not death is a biological issue but tries to show that biological death is not a well-defined fact at present.

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This article is relevant because it presents a novel alternative, Weak Pluralism. This proposal to determine death proposes that individuals can choose under which criteria they want to be considered dead because of existing epistemological discrepancies.

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Lazaridis proposes arguments to defend the right to decide under which criteria an individual wants to be considered dead from a Rawlsian point of view. That is, putting the focus on the political question.