

Hitches to establish BD/DNC protocols to declare death in Africa

Calixto Machado*

Institute of Neurology and Neurosurgery, Department of Clinical Neurophysiology, Havana, Cuba

The World Brain Death Project addresses discrepancies in clinical guidelines across different countries and focuses attention on the need for better education and certification of clinicians who are authorized to make this clinical diagnosis. The World Brain Death Project published an outstanding paper formulating a consensus statement of recommendations on the determination of brain death/death by neurologic criteria (BD/DNC). Now, Lewis et al particularized analysis of brain death/death by neurologic criteria (BD/DNC) protocols in Africa and found that the percentage of countries with BD/DNC protocols is much lower in Africa than in other developing regions. This is the largest assessment up to the present time about the prevalence of BD/DNC protocols in that continent. The authors also affirmed that, compared with Africa, the proportion of countries with BD/DNC protocols in Latin America/the Caribbean and Asia/the Pacific is similar to that of the world in general. In Africa, hundreds of religions are recognized. In Cuba, the Yoruba religion is very common [1]. Santería, was developed in Cuba and then spread throughout Latin America and the United States. Santería was brought to Cuba by people of the Yoruban nations of West Africa (mainly from the actual territory of Nigeria), who were enslaved in great numbers in the first decades of the 19th century. It arose through a process of syncretism between the traditional Yoruba religion of West Africa, the Roman Catholic form of Christianity, and Spiritism. Curiously, although in Cuba, Santería, and Christian religions are common, contrary to Africa, most people accept BD/DNC and organ donation protocols. It is also important to consider many African countries are lacking primary and essential medical services, which makes more difficult the establishment of BD/DNC and organ donation protocols.

The World Brain Death Project addresses discrepancies in clinical guidelines across different countries and focuses attention on the need for better education and certification of clinicians who are authorized to make this clinical diagnosis [2,3,4-16].

Now, Lewis et al particularized analysis of brain death/death by neurologic criteria (BD/DNC) protocols in Africa and found that the percentage of countries with BD/DNC protocols is much lower in Africa than in other developing regions. [1].

An interesting finding was that the few African countries that have BD/DNC protocols are dissimilar compared with other developing countries. The authors also affirmed that, compared with Africa, the proportion of countries with BD/DNC protocols in Latin America/the Caribbean and Asia/the Pacific is similar to that of the world in general [1,2,5-16].

It is important to consider that economical resources in Africa are scarce, limiting the global access to intensive care units (ICUs) not allowing support by mechanical ventilation for brain-injured patients, who can progress to BD/DNC. Additionally, specialists and nurses trained in intensive care are infrequent [1,2,17-21].

Social and religious views on death can impact how death is declared and accepted by the population. In Africa, hundreds of religions are recognized. In Cuba, the Yoruba religion is very common [1]. Santería, (Spanish: “The Way of the Saints”), also called La Regla de Ocha (Spanish: “The Order of the Orishas”) or La Religión Lucumí (Spanish: “The Order of Lucumí”), the most common name given to a religious tradition of African origin that was developed in Cuba and then spread throughout Latin America and the United States. Santería was brought to Cuba by people of the Yoruban nations of West Africa (mainly from the actual territory of Nigeria), who were enslaved in great numbers in the first decades of the 19th century. The name “Santería” derives from the correspondences made by some devotees between the Yoruba deities called orishas and the saints (“santos”) of Roman Catholic piety. Many contemporary practitioners refer to the tradition as “the religion of the orishas” or the “Lukumi religion,” after the name by which the Yoruba were known in Cuba. It arose through a process of syncretism between the traditional Yoruba religion of West Africa, the Roman Catholic form of Christianity, and Spiritism. Curiously, although in Cuba, Santería, and Christian religions are common, contrary to Africa, most people accept BD/DNC and organ donation [21-31].

I agree with Lewis et al.[1,17,26]that identifying the reasons to explain the lack of national BD/DNC protocols in individual nations in Africa are multifactorial and subtly, and differ from country to country, and specialists and nurses trained in intensive care are infrequent [4].

References

1. Greer DM, Shemie SD, Lewis A (2020) Determination of brain death/death by neurologic criteria: The world brain death project. *JAMA* 324: 1078-1097
2. Lewis A, Kumpfbeck A, Liebman J (2021) Barriers to the use of neurologic criteria to declare death in Africa. *Am J Hosp Palliat Care* 10499091211006921. [Crossref]
3. Lewis A, Liebman J, Kreiger-Benson E (2020) Ancillary testing for determination of death by neurologic criteria around the world. *Neurocrit Care* 34: 473-484. [Crossref]
4. Machado C (2021) Cuba's contribution in the diagnosis of brain death/death by neurologic criteria, *Clinical Neurology and Neurosurgery* 206: 106674.
5. Lewis A (2018) Contentious ethical and legal aspects of determination of brain death. *Semin Neurol* 38: 576-582.
6. Lewis A (2019) A Survey of multid denominational rabbis on death by neurologic criteria. *Neurocrit Care* 31: 411-418.

*Correspondence to: Calixto Machado, MD, Ph.D, FAAN, Institute of Neurology and Neurosurgery Department of Clinical Neurophysiology 29 y D, Vedado, La Habana 10400, Cuba, E-mail: cmachado180652@gmail.com

Received: May 10, 2021; Accepted: May 20, 2021; Published: May 29, 2021

7. Wahlster S, Wijidicks EF, Patel PV (2015) Brain death declaration: Practices and perceptions worldwide. *Neurology* 84: 1870-1879.
8. Lu VM, Graffeo CS, Perry A (2019) Rebleeding drives poor outcome in aneurysmal subarachnoid hemorrhage independent of delayed cerebral ischemia: a propensity-score matched cohort study. *J Neurosurg* 19: 1-9.
9. Wijidicks EF (2002) Brain death worldwide: accepted fact but no global consensus in diagnostic criteria. *Neurology* 58: 20-25.
10. Wijidicks EF (2015) Brain death guidelines explained. *Semin Neurol* 35: 105-115.
11. Wijidicks EF (2013) Brain death. *Handb Clin Neurol* 118: 191-203.
12. Lewis A, Kreiger-Benson E, Kumpfbeck A (2020) Determination of death by neurologic criteria in Latin American and Caribbean countries. *Clin Neurol Neurosurg* 197: 105953.
13. Lewis A, Adams N, Varelas P, Greer D, Caplan A (2016) Organ support after death by neurologic criteria: Results of a survey of US neurologists. *Neurology* 87: 827-834.
14. Lewis A, Bakkar A, Kreiger-Benson E (2020) Determination of death by neurologic criteria around the world. *Neurology* 95: e299-e309.
15. Lewis A, Bonnie RJ, Pope T (2020) Is there a right to delay determination of death by neurologic criteria? *JAMA Neurol* 77: 1347-1348.
16. Lewis A, Bonnie RJ, Pope T (2019) Determination of death by neurologic criteria in the united states: The case for revising the uniform determination of death act. *J Law Med Ethics* 47: 9-24.
17. Prin M, Quinsey C, Kadyaudzu C, Hadar E, Charles A (2019) Brain death in low-income countries: a report from Malawi. *Trop Doct* 49: 107-112.
18. Prin M, Pan S, Kadyaudzu C, Li G, Charles A (2018) Development of a malawi intensive care mortality risk evaluation (MIME) model, a prospective cohort study. *Int J Surg* 60: 60-66.
19. Prin M, Kadyaudzu C, Aagaard K, Charles A (2019) Obstetric admissions and outcomes in an intensive care unit in Malawi. *Int J Obstet Anesth* 39: 99-104.
20. Prin M, Ji R, Kadyaudzu C, Li G, Charles A (2020) Associations of day of week and time of day of ICU admission with hospital mortality in Malawi. *Trop Doct* 50: 303-311.
21. Spurgeon JH, Meredith EM, Meredith HV (1978) Body size and form of children of predominantly black ancestry living in West and Central Africa, North and South America, and the West Indies. *Ann Hum Biol* 5: 229-246.
22. Machado C (2014) Historical evolution of the brain death concept: additional remarks. *J Crit Care* 29: 867.
23. Machado C (2003) A definition of human death should not be related to organ transplants. *J Med Ethics* 29: 201-202.
24. Machado C (2008) Variability of brain death determination guidelines in leading US neurologic institutions. *Neurology* 71: 1125.
25. Machado C (2003) [Resolution for the determination and certification of death in Cuba]. *Rev Neurol* 36: 763-770.
26. Machado C (2007) Brain death: A reappraisal. New York: Springer Science Bussiness Media, LLC.
27. Machado C (2008) Variability of brain death determination guidelines in leading US neurologic institutions. *Neurology* 71: 1125.
28. Machado C (2019) Further thoughts about the "transatlantic divide" in brain death determination. *Anaesthesia* 74(5): <http://www.respond2articles.com/ANA/forums/thread/2778.aspx>.
29. Machado C (2010) Describing life to define death: a Cuban perspective. *MEDICC Rev* 12: 40.
30. Machado C (2012) Diagnosis of brain death. *Neurol Int* 2: e2.doi: 10.4081/ni.2010.e2
31. Machado C (2005) Determination of death. *Acta Anaesthesiol Scand* 49: 592-593.