



# Survey of the Knowledge of Brainstem Death and Attitude Toward Organ Donation Among Relations of Neurosurgical Patients in Nigeria

T.B. Rabi<sup>a,b,\*</sup>, H.A. Oshola<sup>a</sup>, and B.O. Adebayo<sup>b</sup>

<sup>a</sup>Division of Neurological Surgery Department of Surgery, Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Nigeria; and <sup>b</sup>Division of Neurological Surgery, Department of Surgery, Federal Medical Centre, Ido Ekiti, Nigeria

---

## ABSTRACT

**Background.** Organ transplantation is a developing field in Nigeria, and availability of organs for donation would be a determining factor of the success of the transplant programs. Patients with brainstem death (BSD) are a major source of organs for transplantation. The level of knowledge of BSD as well as attitudes toward organ donation are very important determinants of people's willingness or otherwise to donate organs. We conducted a survey of relations of our in-service neurosurgical patients to assess their knowledge of brainstem death and attitude toward organ donation. To our knowledge, this is the first study of its kind among the growing Nigerian neurosurgery patient and patient-relations population.

**Methods.** Convenience sampling of randomly selected relations of neurosurgical patients on admission using interviewer-administered questionnaires was performed. Demographic information and information about brainstem death, attitude toward brainstem death, knowledge of organ donation, and attitude toward organ donation were obtained.

**Results.** The study comprised 127 respondents with a mean age of 36 years (range, 19–72). The majority of the respondents (87, 62.4%) were Christians, 122 (96.1%) were Yorubas, and 66 (52.0%) were women. Eighty-five (66.9%) of the respondents had at least a secondary level of education, and 77 (60.6%) were of low socioeconomic status. Twenty-eight (22.2%) of the respondents had heard of brainstem death. Twenty-six (92.9%) of those who had heard of brainstem death believed that the brain could die long before life finally ceases. One hundred twenty-five (98.4%) of the respondents believed that death only occurs when both breathing and heartbeat stop, and 107 (83.6%) would agree with the physician on a diagnosis of brainstem death in the relation. Sixty-five (51.2%) would want such patients put on a ventilator, and, of these, 43 (66.2%) would want such patients on the ventilator in hope that he or she may recover. One hundred twelve (88.2%) of the relations were aware of organ donation, 109 (85.8%) knew that the kidney can be transplanted, and 27 (21.6%) and 17 (13.4%), respectively, were aware of heart and cornea transplant. One hundred five (82.7%) supported organ transplantation, 85 (66.9%) would donate an organ, and 97 (76.4%) would accept a transplanted organ. The majority of the respondents (76, 59.8%) would generally not allow an organ to be taken from their relation, although 70 (55.1%) would allow organ(s) to be harvested from their relation if the person had consented to it before death. More men are likely to donate organs and allow organs to be harvested from their relations than were women. Likewise, respondents with at least a secondary level

---

\*Address correspondence to Taopheeq Rabi, Division of Neurological Surgery, Department of Surgery, LAUTECH Teaching Hospital, Osogbo, Nigeria. E-mail: [eshohealth@gmail.com](mailto:eshohealth@gmail.com)

of education had better awareness of brainstem death and were more likely to donate organs and allow organs to be harvested from their relations than were their less-educated counterparts.

**Conclusions.** The knowledge of brainstem death was low among respondents, although most of them would agree with the physician if such diagnosis was made for their relation. Most of the respondents were aware of organ donation and supported it, but the majority would not allow an organ to be harvested from their relations. Hence, education of the Nigerian people about brainstem death and organ donation is essential to increase the pool of available organs for transplantation in our community.

**B**RAINSTEM death (BSD) refers to complete and irreversible loss of all brainstem functions. [1-3] Patients who are diagnosed with BSD are suitable sources of organs for transplantation. [2] Although organ transplantation is a well-established and effective treatment for selected patients with end-stage organ failure, this is limited mainly by the shortage of donors [4].

A variety of socio-cultural, religious, and demographic factors influence the attitudes of people toward organ donation. [5-7] The level of knowledge of BSD as well as attitudes toward organ donation are very important determinants of people’s willingness or otherwise to donate organs [6,8].

Nigeria, being a socio-culturally and religiously diverse nation, has a variety of factors that may affect the perception and attitude of people in various communities toward organ donation.

This study assessed the knowledge of brainstem death and determined the factors that guide the perception and attitudes of a cohort of Nigerians regarding organ donation and transplantation.

**METHODS**

**Settings**

This study conducted at the Ladoke Akintola University of Technology (LAUTECH) Teaching Hospital, Osogbo, and the Federal Medical Center, Ido-Ekiti. Both institutions provide neurosurgical services in South Western Nigeria. The first is located in an urban center; the latter is in a rural part of the country.

**Respondents**

Relations of neurosurgical in-patients at both centers were selected for the study. The population of neurosurgical in-patients during the study period was about 350. Convenience sampling was performed, and 127 consenting relations were randomly enlisted for participation in the study between 2011 and 2013. Only 1 relation per patient was enlisted into the study to ensure a good representation of the study population.

**Questionnaire**

The data collection instrument was a structured interviewer-administered questionnaire (Figs 1 and 2). The questionnaire was divided into 3 sections: the first section was for demographic information; the second section was on information about, and altitude toward, brainstem death; and the third section was on knowledge of

organ donation and attitude toward organ donation. Yoruba translations were provided by the interviewer for respondents who did not understand the English language. The questionnaire was validated by initially administering it to a small, select group of patient relations to test its cultural acceptability. The questionnaire generally followed the patterns adopted in previously validated test instruments with local adaptations and contents to suit the ethno-religious and cultural needs of the study population [9,10].

**Data Analysis**

Data were tabulated and simple descriptive analyses were performed with the use of the Statistical Package for the Social Sciences (SPSS), version 11 (SPSS Inc, Chicago, Ill, United States) to

**KNOWLEDGE AND PERCEPTION OF BRAIN STEM DEATH/ ATTITUDE TOWARDS ORGAN DONATION AMONG RELATIONS OF NEUROSURGICAL PATIENTS IN NIGERIA.**

**BACKGROUND DATA**

Age (yrs)..... Sex: M  F  Occupation.....  
 Religion:..... Ethnicity..... State of Origin:.....  
 Educational Qualification: Nil  Primary  Secondary  Polytechnic  University   
 Socioeconomic class:..... Relationship to patient.....

**PATIENT'S DETAILS**

Hospital Number:..... Age..... Sex.....  
 Diagnosis.....  
 Brain Stem Death: Yes  No

**BRAIN STEM DEATH**

1. Have you ever heard of brain stem death (BSD) or brain Death? YES  NO   
 If NO, Go to item 5

2. If yes, through what medium?  
 Doctors  Newspapers  Electronic media   
 Nurses  Internet  Other Hospital Worker

3. Describe what you know about BSD:  
 It includes cessation of breathing   
 It includes cessation of heart beats   
 Affected individual may need artificial ventilation   
 Affected individual may still respond to calls/painful stimulation   
 It only occurs following head injury   
 Diagnosis allows for organ donation   
 Diagnosis allows times for the family to make crucial decisions

4. Do you believe the brain can die long before 'life' finally ceases? YES  NO

5. Describe your belief about death  
 Brain Stem Death represents death   
 Death occurs only when breathing and heart beats stops   
 Death does not exist, but the soul is transformed into a celestial entity

6. Have you ever had a relation diagnosed as having BSD? YES  NO

7. If Yes to item 6, state the following:  
 i. Likely cause of death.....  
 ii. Any ventilatory support.....

**Fig 1.** Structured Questionnaire A.

Download English Version:

<https://daneshyari.com/en/article/5729118>

Download Persian Version:

<https://daneshyari.com/article/5729118>

[Daneshyari.com](https://daneshyari.com)