# PERCEPTION TO ORGAN AND CORPSE DONATION AMONG STUDENTS OF BASIC MEDICAL SCIENCES

## **ABSTRACT**

In this era of great health challenges, organ donation may be the only intervention to failing and failed organs. Organ donation is willingly accepting to donate an organ or part of an organ to someone with a failing organ or failed organ. There are very few voluntary donations. Cadavers a major tool in the study of anatomy is gotten from unclaimed bodies, corpse of condemned criminals and donation of corpse. This cross sectional survey comprised of 707 students, 390 dissecting students and 317 non dissecting students from the Faculty of Basic Medical Sciences, Delta State University Abraka. Structured questionnaires were administered to the students and data analysed. This was done to know the perception of student to organ and corpse donation and to assess if dissection affects the willingness to donate an organ or corpse for research. Result generally showed a negative attitude to organ and corpse donation. Only 5.9% considered donating their organs and 4.1% considered donating their corpse for research. The poor attitude towards organ and body donation may be attributed to people not wanting their bodies to be disrespected (30%), fear of the effect of donation (23%), religious beliefs (10%), and traditional beliefs (6%). Lack of awareness on donation of organs and corpse also accounted for a few percentages.

**Key Words:** Organ Donation, Corpse Donation, Failed organs

EBEYE Abimbola1\*

OJEBOR Chukwuedu <sup>1</sup>

ADE Alabi<sup>2</sup>

<sup>1</sup>Department of Anatomy and Cell Biology Delta State University, Abraka.

> <sup>2</sup>Department of Anatomy, University of Ilorin

\*corresponding author email: princessebeye@gmail.com

## INTRODUCTION

The demand for organ transplant has been on the increase due to great health challenges. Organ donation may be the only intervention to failing and failed organs. Organ donation has been described as wiliness to donate an organ or part of an organ to someone with a failing/failed organ.

## Access this article online

Quick Response Code

http://ijfmi.com/index.php/home/article/view/10



Organs such as the heart, kidneys, liver, lungs, pancreas, intestine, and thymus can transplanted but there are very few voluntary donors.1Organ donors may be living, brain dead, or dead via circulatory death.2 Due to shortage of organ donors worldwide, the demand for organs transplantation continues to overwhelmingly exceed the limited supply.3 According to the United Network for organ sharing, 10,000 to 12,000 patient eligible to receives organ donation died out of about 90,000 patients that were on the waiting list. A more pathetic situation arises when comparison was made with around 6,000 existing donors.3 Worse scenario was found among Nigerians as organ and body donations are According to Professor completely alien. Christopher, organ donation is still very rare in Nigeria.<sup>4</sup> Nigeria has diverse culture and religious

belief and a vest majority of its citizen's hold on to their religious and cultural beliefs. Many of these beliefs tend to have negative influences on their attitude towards organ donation.

Cadaver dissection is an integral part of teaching and research. In fact, it has been described as the central pillar of learning human anatomy<sup>5</sup> and a medical tool for medical educators and anatomists. <sup>6</sup>However, procuring cadavers for dissection is not an easy task. Cadavers for medical schools are usually gotten from those of dead unclaimed bodies, from prisons, hospitals, bodies of dead armed robbers and rarely from voluntary body donation.<sup>7</sup> leaving some school with limited number of this vital tool.

Currently there is no record of voluntary body donation in Nigeria. Body donation is freely giving one's corpse for medical research.<sup>6</sup>

There are few recorded cases of voluntary organ donations in Nigerian as revealed by the work of Osuagwu, Imosemi and Oladeyo (2004).8 Cantarovich in (2005) showed there are lots of resistances towards body donation and organ donation.9 Poor organ and body donation may be due to lack of awareness and lack of information on the procedural details of such donations. 1,3 It could be for religious and cultural reasons. Lack of trust and misinformation could also be a problem.

It is important that persons in the medical field have positive attitude to organ donation. Attitude of health professional towards organ donation can also be a source of encouragement to others. This study therefore seeks to know the perception of medical and paramedical student to organ and body donation. It also wants to know the influence of dissection on perception to donation.

#### **MATERIALS AND METHODS**

This cross sectional survey administered a total of 740 structured questionnaires but only 707 were correctly filled and this was used for the analysis. 390 volunteered students from Medicine and Surgery, Anatomy and Physiology department comprised those involved in dissection, while 317 volunteered students from medical Biochemistry and Pharmacology comprised those that do not dissect. Approval was sought and gotten from ethical committee of Faculty of Basic Medical Sciences, Delta State University. Reference number DELSU/CHC/ANA/68/23

Data collected was subjected to descriptive statistical analysis using SPSS version 16. Results were expressed in percentages.

#### RESULTS

Table 1: Socio demographic characteristics of study respondents

Characteristic		Number and percentage for dissecting student		Number and percentage for non-dissecting student	
	Male	191	49.0%	141	47.0%
Gender	Female	199	51.0%	176	53.0%
	Total	390	100%	317	100%
	Christian	380	97.4%	307	97.1%
	Muslim	4	1.0%	2	0.8%
Religion	African Traditional Religion	4	1.0%	2	0.8%
	Others	2	0.6%	6	1.3%
	Total	390	100%	317	100%

Table 1 reveals the gender distribution of 191 males and 199 females and religious affiliations of respondent, 97.4% are Christians, 1% Muslims, traditional religion 1% others 0.6% for dissecting students 141 males and 175 females, 97.1% Christians, 0.8% Muslims, 0.8% traditional religion, 1.3% other religion

Table 2: Student's perception to organ and corpse donation

SN	Question	Yes	No	Undecided	Total
1	Is donation of corpse and organ morally right?	376 (53.2%)	182 (25.7%)	149 (21.0%)	707 (100%)
2.	Do you have knowledge of a donor?	211 (29.8%)	496 (70.2%)	0	707 (100%)
3.	Have you attended a corpse/organ donation awareness program?	62 (8.8%)	645 (91.2%)	0	707 (100%)
4.	Do you consider donating your body after death for scientific research?	29 (4.1%)	586 (82.9%)	92 (13.0%)	707 (100%)
5.	Do you consider donating your organ?	42 (5.9%)	574 (81.1%)	91 (12.9%)	707 (100%)

Table 2 reveals 53.2% believed it was morally right to donate but only 5.9% considered donating an organ and 4.1% considered donating their body after death for scientific research, majority do not have knowledge of a donor and never attended awareness Programme.

Table 3: Reasons for resistance to body and organ donation

SN	Questions	Yes	No	Total
a.	Against my religious belief	70 (10.0%)	637 (90.0%)	707 (100.0%)
b.	Against my tradition	42 (6.0%)	665 (94.0%)	707 (100%)
c.	Fear of effect of organ donation	162 (23.0%)	545 (77.0%)	707 (100.0%)
d.	I do not want my corpse to be disrespected	213 (30.0%)	494 (70.0%)	707 (100.0%)
e.	Others	137 (19.3%)	570 (80.7%)	707 (100.0%)

From table 3, a larger percentage do not like to donate their corpse because they do not want it to be disrespected, some for fear of effect of organ donation refused to donate, 6% for traditional reasons and 10% refuse to donate for religious reasons.

Table 4: Table showing relationship between gender and body donation

	Consid	Considering donating body			
Gender	Yes	No	Undecided	Total	
Male	15 (2.1%)	270 (38.1%)	47 (6.6%)	332 (47.0%)	
Female	14 (2.0%)	316 (45.0%)	45 (6.4%)	375 (53.0%)	
Total	29 (4.1%)	586 (82.9%)	92 (13.0%)	707 (100.0%)	

Table 4 reveals 4.1% of the total population are willing to donate their body for medical research.

Table 5: Table showing the relationship between dissection and corpse donation

	Considering donating body				
Students	Yes	No	Undecide d	Total	
Involved in dissection	20 (2.8%)	317(44. 8%)	53 (7.5%)	390 (55.1%)	
that do not dissect.	9 (1.3%)	269 (38.0%)	39 (5.5%)	317 (44.9%)	
Total	29 (4.1%)	586 (82.9%)	92 (13.0%)	707 (100%)	

#### **DISCUSSION**

Results gotten from this study showed that there was negative attitude to organ and corpse donation among students of Basic Medical Sciences in Delta State University. Although 53.2% agreed that it's morally right to donate an organ, only 5.9% considered donating theirs. (Table 2). These may be due to religious and traditional belief, fear of the effect of donating an organ, disrespect to human body and lack of awareness as shown in table 3. A similar study carried out by Nisreen et al. (2013) revealed 81.6% thought it was morally acceptable to donate an organ but about half of this number was willing to donate. <sup>10</sup>

From literature most studies done outside Nigeria gave much higher percentages for those willing to donate an organ. One of such was that of Prasanna et al., who carried out a study on patients where 59.6% expressed willingness to donate their organs. 11 Marta et al., also carried out a study on polish nurses where 73% gave a positive response towards donating their organs.<sup>2</sup> Nisreen et al. (2013) carried out a study on medical students where demonstrated willingness to donate their organs.10 A study carried out in Saudi Arabia revealed 57% of health care providers were willing to donate an organ. 12

Studies done in Nigerian includes that of Eziyi et al., who carried out a survey in a Nigerian medical school where only 14.7% consider donating an organ, Esezobor et al., carried out a study on health workers (2012) where 59.3% indicated their willingness to donate an organ. 1,13 The study of Odunsava and Ladipo (2006) revealed 30% of his respondent were willing to donate an organ.14 As mentioned earlier results revealed Nigerians lack awareness on organ and corpse donation. Only 8.8% have attended awareness program (Table 2), and only 29.8 % have knowledge of a donor (Table 2). Religious and cultural beliefs could have a great effect on organ and corpse donation, some believe if any part of the body is donated or removed, the body will not be acceptable by God and the linage continuity might be endangered.

Attitude towards corpse donation for teaching was even worse as only 4.1% of 707 respondent considered donating their corpse (Table 4). This percentage is low as compared to that of Sophie et al. (2012) where 25.5% of 54 respondents considered donating their bodies and that of Anyanwu and Obikili, where 22.9% of 46 working anatomists considered donating their body to science.<sup>15</sup>

From the results of 10 years' retrospective study carried out by Bhusari et al., it was revealed that donation increased with the emergence of an awareness programme in North Maharashtra.6 The major reason for resistance to organ and corpse donation is that most subjects do not want their body to be disrespected (30%) (Table 3). This is in concordance with the work of Prasannaet al. 11 Secondly, fear of the effect of donation (23%) (Table3). This is also in line with the work of Prasana et al., where study respondent expressed worries about receiving adequate healthcare after donation. Also, religious (10%) and traditional beliefs (6%) account for the next reasons for resistance. This was also in agreement with the work of Prasana et al. (2013) where 30.9% of study respondents were not willing to donate due to religious reasons. 11Results also showed that more males considered donating their body for research purposes even when the population of females are more (Table 4) This is similar to work of Prasanna et al. (2013) where males were more willing to donate (64.8% vs 56.8%).

Results of this study also show that students involved in dissection are more willing to give out their body to science than student that do not dissect (Table 5). This contradicted the work of Emeka, Emmanuel and Augustine (2014) in which unwillingness to donate was noticed among study subjects that were involved in dissection. 15 Organ donation seems to be gaining more awareness in other parts of the world better than Nigeria. Based on the results gotten from this study, it is advised that more research on this topic be carried out in other health and academic institutions. Orientation should be given to students to correct the negative impressions gotten from traditional and religious believes towards organ and corpse donation. Cadavers should be treated with respect and managed properly to encourage dissecting student towards organ donation. Health institution should organise awareness programmes for organ and corpse donation emphasizing its importance to medicine and health care. Organ donation may help to prolong the life of a recipient and bring back joy and happiness to a devastating family.

### CONCLUSION

Students of Delta State University Abraka showed a negative attitude to corpse/body and organ donation due to low level of awareness. Moreover, dissection can affect the willingness to donate one's body for scientific research. Males are also more likely to donate their bodies for research than females.

#### REFERENCES

- 1. Eziyi A. K., Osho P.O., Ajao K. O., Ojo O. E., Badmus T. A., &Salako A.A. (2014). Determinants of Acceptance of Organ Donation among Medical Students, Nigeria. *International Journal of Medicine and Medical Sciences*, 1(8) 116-121
- 2. Marta M., Agneszka K., Artur W., & Karolina K. (2013). Knowledge and Opinions Of Nurses About Organ Transplantation In a Polish. Hospital. *Journal Of Pre-clinical And Clinical Research*, 7(1) 48-52
- 3. Nur I. B., & Zukarnain Z. (2012). Knowledge, Religious Beliefs and Perception towards Organ Donation from Death Row Prisoners from the Perspective of Patients and Non-Patients in Malaysia: A Preliminary Study. *International Journal of Humanities And Social Sciences*, 2(24) 197-206
- 4. Organ Donation Rare In Nigeria Says LUTH Chief. (2015, May 19). The Nation. Retrieved from www.thenationonlineng.net/organ\_donation\_rar e\_rare\_in\_nigeria.
- 5. Rajkumari A., Das B. K., Sangma G. T. N., & Singh Y. I. (2008). Attitudes and Views of First Year Medical Students Towards Cadaver Dissection In Anatomy Learning. *Calicut Medical Journal* 6(4), 1-6
- 6. Bhusari P. A., Kathe D. P., Khairnar K. B., Shukla K., & Chormunge V.B. (2012). Whole Body Donation: An Attitude and Perception in
- North Maharashtra. International Journal of Health Sciences, 2(2)15-19
- 7. Gangata H., Ntaba P., Akol P., & Louw G. (2010). The Reliance on Unclaimed Cadavers for Anatomical Teaching by Medical Schools in Africa. *Anatomy Science Education* 3(4)174-183

- 8. Osuagwu .F.C., ImosemiIi .O., Oladejo .O.W. (2004) Sources of cadaver used for dissection at the Ibadan medical school, Nigeria *Analysis of a three-year data*. *African journal of biomedical research*, vol. 7 93 95
- 9. Cantarovich F. (2005). Public Opinion and Organ Donation Suggestions for overcoming Barriers. *Ann Transplant*, 10(1) 22-25
- 10. Nisreen F. A., Amal Q., Basmah N. J., &Nosheen Z. (2013). Knowledge and ethical perception regarding organ donation among medical students. *BMC Medical Ethics* 14(38)
- 11. Prasanna M., Prithvishree R., Unnikrishnan B., Rekha T., Tanuj K., Nithin K., Mohan P., Vaman K., Ramesh H., &Divyavara Prasad K. (2013). Perceptions and Attitudes towards Organ Donation among People Seeking Healthcare in Tertiary Care Centres of Coastal South India. *Indian Journal of Palliative Care*, 19(2), 83-87
- 12. Alsultan M. 2012. The perception of organ donation among health-care providers in the intensive care units at a tertiary centre. *Saudi J Kidney Dis Transpl.* 23(4):724-8.
- 13. Esezobor C. I., Disu E., &Oseni S. B. (2013). Attitude to Organ Donation among Healthcare Workers in Nigeria. *Clinical Transplant*, 26(6) 612-616
- 14. Odusanya O.O., Ladipo C.O. 2006. Organ donation: Knowledge, attitudes and practice in Lagos, Nigeria. *Artif Organs*; 30: 626-629
- 15. Emeka G. A., Emmanuel N. O., & Augustine U. A. (2014). The Dissection Room Experience; A Factor in The Choice of Organ and Whole Body Donation- A Nigerian Survey. *Anatomical Sciences Education*, 7(1)56-6314. Amato PR. Previti D. People's reasons for divorcing: gender, social class, the life course and adjustment. J of Family Issues. 2003; 24: 602-26.

**How to cite this article**: Ebeye OA, Ojebor C, Ade A; Perception to organ and corpse donation among students of basic medical sciences; Int. J of Forensic Med Invest 2016;2(1)8-12