### 50 - DIFFERENCES AND SIMILARITIES ON ORGAN DONATION OF THREE SOCIAL GROUPS

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#### INTRODUCTION.

With the technological advance in the area of the health, the organ transplants appeared as one of the successful discoveries to facilitate the life of those that need an organ to continue living (SÁ; NAVES,2004, p.93). The human being is the main character involved in that procedure, because without his allowance the donation is not rendered and lives get unsaved. It is thus presumed, that the collaboration of the society is generally essential for success aiming at earnings the public health. Hence, the appropriate information of the population on organ transplants and donation is constituted in fundamental factor for achieving that goal.

The Brazilian legislation of organ donation and transplant is the Law no. 9.434/97, that had some articles modified by the Law number 10.211/01. Among the modifications, it is important to mention two of them, the after encephalic death donation (article 4th) and donation in life (art.9th).

Before the alterations from the Law number 10.211/01, the Law number 9.434/97 as it was stated in the 4th principle of the conceited donation that every person was presumed to be a donor, and could only stopped being when expressed the contrary will in the identity card or driving license.

That article provoked plenty of arguments and discussion at that time and consequently, its modification became necessary, which was implanted by the Law number 10.211/01.

The Law no. 10.211/01 also gave a new composition to the art. 4th of the document mentioned, removed the conceited donation and began to foresee that cutting out organs for transplant from people with cerebral death, depends on the spouse's authorization or relative, on a written document by two witnesses present to the verification of the death. Hence, the donation authorization is given by the family.

The art. 3<sup>rd</sup> of the Law no. 9434/97 establishes that the diagnosis of encephalic death should be verified and registered by two doctors non participants of the removal and transplant teams, by the use of clinical and technological criteria by the resolution no. 1480/97, of the Federal Council.

According to the Associação Brasileira de Transplante de Orgãos - ABTO (2008), the encephalic death is the legal definition for death, in other words, it is the complete and irreversible halt of all the brain functions. This means that, as a result of severe aggression or serious wound in the brain, the blood that comes from the body and supplies the brain is blocked and therefore the brain dies.

So, for being subject that involves clinical issues, the diagnosis of the encephalic death is not still quite clear for the society, mainly for the people at lower socioeconomic levels.

As for the donation in life, the issue is stated in the art. 9, of the Law no. 9434/97, and the art. 15, of the Ordinance no. 2268/97. Hence, the donation achieved by the person still in life is only allowed when dealing with double organs, when the organ removal does not compromise the donor's vital functions. The donor should specify, in written document, in the presence of two witnesses, which organ is being donated for transplant, and cutting out organs the document will have one copy sent to the Public Ministry, as condition to render the donation. That new report brought some discussions like the possibility of paying the donor or the organ trade (PASSARRINHO;GONÇALVES;GARRAFA, 2003).

Hence, in order to achieve a donating act, it is necessary, at least, that people have information on transplants, specifically on its process.

In this research, it is attempted to know whether three social groups that live in different social environments present significant differences in the knowledge on themes related to the donation of organs. Two of them consist of students of different areas and the third group consists of some evangelizing people of the catholic church, in of the fishermen's villa.

### **METHODS**

A questionnaire containing 06 questions was used as instrument for data collection, being 04 (four) questions with justifications about the organ donation, aspects of the legislation and ethical questions until the donation process.

The research was accomplished from December 2006 to February 2007.

The studied population consisted of 160 informants, and the sample was extracted at randomly, following a raffle criterion, totalizing 75 people, being 25 students (of a population of 50 students) of the 7<sup>th</sup> level of the course of medicine at UFPB, 25 students of the 3<sup>rd</sup> level (of a population of 50 students) of the course of Law at UFPB and 25 people of the evangelizing group of the church (of a population of 60 people) in the community of the fishermen's villa in Manaíra, in the City of João Pessoa in Paraíba. The research was approved by the Comitê de Ética em Pesquisa do Centro de Ciências da Saúde da Universidade Federal da Paraíba CEP/CCS.

After having raffled the interviewees, the questionnaire was given to each of them, with the instructions and with an allowance document.

In order to verify the presupposition that there is or not difference among the groups in the knowledge on the organ donation theme, the Chi-square test was used. It is a test of hypotheses whose aim is to compare proportions, i.e., the possible divergences amongst the expected and observed occurrences. If the probability goes low (particularly smaller than 5%) it can be concluded that the groups are different with relationship to the opinions, statistically significant. Hence, the Chi-square test was used to test whether the groups (their opinions) are homogeneous, and, in case this indicates that the groups present different opinions in some of the topics, Fisher's exact test would be used to compare the groups two-by-two to verify whether some differ from each others. The significance level of 5% was used for both tests.

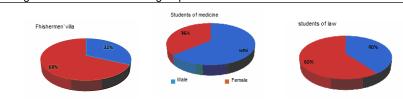
In order to justify the answers of the undecided informants, the technique of content analysis (BARDIN, 1977) was used so as to classify the *yes* and *no* answers as well as for the justifications of the answers on the receptors list.

### DISCUSSION

According to the collected data, it is observed that in the group of students of Law at the 3<sup>rd</sup> level at UFPB and in the group of the church of the fishermen's villa, the percentage of female is 60% and 68%, respectively, whereas in the group of the students of

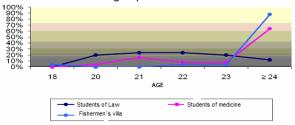
medicine of the 7th level at UFPB, the percentage of males is 64%, as shown in Graph 1.

Graph 1: Percentage of sex in the three social groups



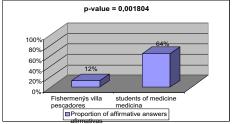
Due to extreme values in the ages, the calculation of the medium age was opted for the three groups. The students of medicine and Law were very closely related in terms of ages, 24 and 22 years, respectively. The people of the evangelizing group of the church in the community of the fishermen's villa, presented medium age above those found in the other two groups, 36 years, as seen in Graph 2.

Graph 2. with age percentile for the three social groups:



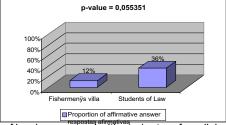
In order to know if there is difference among the groups researched about the organ donation and transplants, through the questions, the Chi-square test was firstly used. After having applied the Chi-square test in the 06(six) answers, the significant divergence was found in the answer about reliability in the encephalic death diagnosis, when the Chi-square test presented strong indications that there were differences among the groups, p-value of 0,00522. in order to know which of the three groups was different, Fisher's exact test was applied comparing the social groups two by two, when the differences were confirmed among the group of the people of the church of the fishermen's villa and the medicine students, that presented a p-value of 0,001804. It is thus seen that 12% of the residents of the fishermen's villa trust this diagnosis, contrarily to the 64% of the medicine students. Whereas 48% of the evangelizing group of the fishermen's villa answered that they do not know how the encephalic death diagnosis is made. The data reveal that there is the need of more education campaigns to the society about organ donation so as to inform and clarify how the cerebral death occurs, and thus increase the number of *post mortem* donors.

Graph 3: Fisher's exact test for the reliability in the encephalic death diagnosis



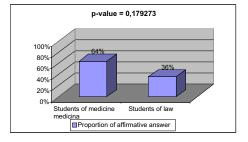
Despite the significant difference verified among the medicine groups and the religious people of the fishermen's villa, when compared with this last group (the fishermen's villa) with the students of the 3<sup>rd</sup> level of Law, it was observed that there was no statistically significant difference among these two groups thus indicating that they have homogeneous opinions with relationship to reliability in the encephalic death diagnosis. Perhaps this happens because the students of law get more worried about legal issues.

Graph 4: Fisher exact test for the reliability in the encephalic death diagnosis.



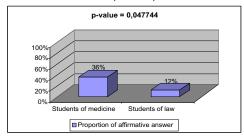
When the group of the students of law is compared with students of medicine, it is observed that there is no statistically significant difference between theem, thus indicating that they have homogeneous opinions with relationship to the trust in the encephalic death diagnosis.

Graph 5: Fisher's exact test for the reliability in the encephalic death diagnosis.



For the question about relying on the receptors list, after having applied the Chi-square test among the groups, no significant difference was identified among the groups. However, after a redistribution in the undecided category for the yes and no answers, According to the content analysis, it was observed through the Fisher test that there is a statistically significant divergence of opinions between the students of medicine and Law, in which 12% of the students of law showed reliability in the list; but the students of medicine showed 36%. Such a difference was only realized when analyzing the groups two-by-two, presenting a p-value of 0,0477. The remaining answers were homogeneous. With application of the content analysis in the justifications of the answers, in the category "do not trust the unique list", the subcategory that mostly occurred in the group of the students of Law was "due to corruption". Therefore, the difference is possibly because the performance of the students of law is more questionable, as well as the environment in which they live influences their way of thinking, more centered to legalist and investigating issues and so, the appearance of linked news to accusations in the unique list, generates unreliability. As for the students of medicine of the 7th level, demonstrate credibility in the medical staff and in the health sector, where they will soon be acting as professionals.

Graph 6: Fisher's exact test for the trust in the unique receptors list



With relationship to the questions in table 01, no statistically significant evidence was found to accept the supposition that the groups diverge in relation to their opinions.

Comparison between the groups (% of affirmative answers)

	Fishermenÿs villa (%)	students of medicine (%)	students of law (%)	p-value
Would you donate an organ?	72	76	68	0,82003
For the fact that anyone can be a donor, does it favor the trade of organs?	68	76	64	0,70238
Do you find the unique list of receptors reliable ?	8	20	4	0,11886
Once the patient with encephalic death is a potential donor, do you rely on a diagnosis of such death type?	12	64	36	0,00522*
Does the organ transplant law respect the human dignity?	40	28	48	0,49935
Would you donate organs in life?	84	84	72	0,47237

### CONCLUSION

It is concluded that among the informants, for belonging to three social groups of different characteristics, there was not any knowledge estrangement on the raised questions on the theme donation of organs because, among the six questions, there was only statistically significant difference just in two.

Hence, the data revealed that the three social groups, think in a similar way about being donor after the encephalic death and in life, about the nepotism of the trade of organs in the donation among living beings, and about the respectability of the human dignity in the transplant law.

The statistically significant difference was only detected, in the questions about the reliability in the encephalic death diagnosis, among the group of the students of medicine and the people of the group of the church in the villa of the fishermen, possibly due to the lack the explanation of how it is accomplished and processed. The other difference was on the reliability on the unique receptors list, between the students of medicine of the 7th level at UFPB and the students of Law of the 3th level at UFPB. It is probably due to the accusations in the unique receptors list, thus generating certain distrust on those that, according to their environment, see the application of the law as a justice factor.

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# DIFFERENCES AND SIMILARITIES ON ORGAN DONATION OF THREE SOCIAL GROUPS ABSTRACT

This study aims at comparing the answers of three social groups dealing with themes related with organ donation and the transplants law in order to know whether there is divergence among them. The sample consisted of 25 students at the 7<sup>th</sup> level of the course of medicine at UFPB, 25 students at the 3<sup>rd</sup> level of the course of Law at UFPB and an evangelizing group of 25 people of a church in the fishermen's villa in the city of João Pessoa-PB. The research was accomplished from December 2006 to February 2007. The data collection consisted of a questionnaire applied to the three groups. The questionnaire contained data dealing with age, sex, group and six closed and open questions on the theme. For the analysis of the quantitative data the Chi-square test was applied with the level of significance at 5% and for the justifications of the answers of the undecided informants, the technique of content analysis was used. It was observed that the groups are homogeneous in four of the six surveys, i.e., there was only difference statistics in two. The significant difference was observed in the answer on reliability in the diagnosis of encephalic death, 64% of the

students of medicine at the 7<sup>th</sup> level at UFPB trust this diagnosis, the evangelizing group of the fishermen's villa versus 12%. The other difference lied in the answer on the reliability in the receptors unique list, 36% of the students of the 7<sup>th</sup> level at UFPB affirmed to trust the list; the students of Law of the 3<sup>rd</sup> level at UFPB versus 12%. This difference was only observed when the exact test of Fisher was applies. It is concluded that among the informants, due to their belonging to three different social groups of different characteristics, there was no identification of knowledge estrangement about the issues on the theme " organ donation ", being thus demonstrated that all of them have the same opinion in four of the six surveys.

Key words: Organ transplants, Knowledge, unique Lists, encephalic death diagnosis

# SIMILITUDES ET DIVERGENCES ENTRE TROIS GROUPES SUR LE DON D'ORGANES RÉSUMÉ

Dans cette étude notre objectif de comparer les réponses de trois groupes sociaux sur des thèmes liés au don d'organes et à la loi sur les greffes afin de savoir s'il y a divergence entre ces groupes. L'échantillon était constitué de 25 étudiants de 4 eme année de médecine de l'UFPB, de 25 étudiants de 3 eme année de droit de l'UFPB et de 25 personnes du groupe évangélisateur d'un village de pêcheurs du quartier de Manaíra, dans la ville de João Pessoa, État de Paraíba. La reherche a été menée de décembre 2006 à février 2007. Pour recueillir les données, nous avons appliqué un questionnaire aux membres des trois groupes, questionnaire qui comportait des données comme l'âge, le sexe, le groupe et six questions fermées et ouvertes sur le thème. Pour l'analyse des données qualitatives, nous avons appliqué le test Qui-carré avec le niveau de signification de 5% et pour les justificatifs des réponses des indécis, nous avons utilisé la technique de l'analyse de contenu. Nous avons observé que les groupes sont homogènes dans quatre des six relevés, soit une différence statistique seulement dans deux d'entre eux. La différence significative a été observée dans la réponse sur la confiance dans le diagnostic de mort cérébrale. 64% des étudiants en médecine de 4 en année de l'UFPB lui font confiance contre 12% du groupe évangélisateur du village des pêcheurs. L'autre différence concerne la réponse sur la confiance dans la liste unique des récepteurs. 36% des étudiants de 4 en l'UFPB ont affirmé avoir confiance dans cette liste contre 12% des étudiants en droit de 3 en année de l'UFPB, différence qui n'a été observée que lorsqu'a été appliqué le test exact de Fisher. Nous en concluons que parmi les interviewés, même appartenant à trois groupes sociaux aux caractéristiques distinctes, n'est pas observée une grande différence de connaissance sur les questions posées sur le « don d'organes », ce qui démontre ainsi que tous ont la même opinion sur quatre des six relevés.

Mots-clés: Greffe d'organes, Connaissance, Liste unique, diagnostic de mort cérébrale.

# SEMEJANZAS Y DIVERGENCIAS DE TRES GRUPOS SOCIALES SOBRE LA DONACIÓN DE ÓRGANOS. RESUMEN

El objetibo de este estúdio es comparar las respuestas de tres grupos sociales sobre temas relacionados con la donación de órganos y la ley de los transplantes, para saber si hay divergencias entre ellos.La muestra fué compuesta por 25 estudiantes del 7mo. Período del curso de medicina de la UFPB (Universidad Federal de Paraiba), 25 estudiantes del 3 er. Año del curso de derecho todos de la UFPB y 25 personas del grupo de evangelismo de la iglesia en la villa de pescadores de la ciudad de Joâo Pessoa, PB.La investigación fué realizada de Diciembre de 2006 a Febrero del 2007. Para la colecta de datos fué aplicado un cuestionario. Para los tres grupos, conteniendo datos como: edad, sexo, grupo y seis preguntas cerradas y abiertas sobre el tema. Para análisis de los datos cuantitativos fué aplicado el test Quicuadrado con un nivel de significado del 5% y para las justificativas de las respuestas de los indecisos fué utilizada la técnica de análisis de contenido. Se observo que los grupos son homogeneos en cuatro de los seis levantamientos, o sea , solo hubo diferencia estadística en dos.La diferencia significativa fue observada en la respuesta sobre la confianza en el diagnóstico de muerte encefálica,64% de los estudiantes de medicina del 7mo. Período de la UFPB confian en este diagnóstico, versus 12% del grupo evangelizador de la villa de pescadores. La otra diferencia fué en la respuesta sobre la confianza en la lista única de los receptores, 36% de los estudiantes del 7mo período de la UFPB afirmaron confiar en la lista, versus 12% de los estudiantes de derecho del 3er año de la UFPB, esta diferencia solo fué observada cuando se aplicó el test exacto de Fisher. Se concluyó que entre los investigados, por constituir tres grupos sociales con características distintas, no fué identificado un distanciamiento de conocimientos sobre las cuestiones levantadas sobre el tema "donación de órganos", quedando demostrado, que todos tienen la misma opinión en cuatro de los seis levantamientos.

Palabras llaves: Transplante de órganos, Conocimiento, Lista única, diagnóstico de muerte encefálica.

# SEMELHANÇAS E DIVERGÊNCIAS DE TRÊS GRUPOS SOCIAIS SOBRE DOAÇÃO DE ÓRGÃOS. RESUMO

O objetivo deste estudo é comparar as respostas de três grupos sociais sobre temas relacionados com a doação de órgão e a lei dos transplantes, para saber se há divergência entre eles. A amostra foi composta por 25 estudantes do 7° período do curso de medicina da UFPB, 25 estudantes do 3° ano do curso de direito da UFPB e 25 pessoas do grupo evangelizador da igreja na vila de pescadores da cidade de João Pessoa, PB. A pesquisa foi realizada de dezembro de 2006 a fevereiro 2007. Para a coleta de dados foi aplicado um questionário para os três grupos, contendo dados como: idade, sexo, grupo e seis perguntas fechadas e abertas sobre o tema. Para análise dos dados quantitativos foi aplicado o teste Qui-quadrado com nível de significância de 5% e para as justificativas das respostas dos indecisos, foi utilizada a técnica de análise de conteúdo. Observou-se que os grupos são homogêneos em quatro dos seis levantamentos, ou seja, só houve diferença estatística em dois. A diferença significativa foi observada na resposta sobre a confiança no diagnóstico de morte encefálica, 64% dos estudantes de medicina do 7° período da UFPB confiam neste diagnóstico, *versus* 12% do grupo evangelizador da vila dos pescadores. A outra diferença foi na resposta sobre a confiança na lista única de receptores, 36% dos estudantes do 7° período da UFPB afirmaram confiar na lista, *versus* 12% dos estudantes de direito do 3° ano da UFPB, diferença esta que só foi observada quando aplicado o teste exato de Fisher. Conclui-se que entre os pesquisados, por se constituírem em três grupos sociais de características distintas, não foi identificado um distanciamento de conhecimento sobre as questões levantadas sobre o tema "doação de órgãos", ficando demonstrado, que todos têm a mesma opinião em quatro dos seis levantamentos.

Palavras chaves: Transplantes de órgãos, Conhecimento, Lista única, Diagnóstico de morte encefálica.