

15 - EPIDEMIOLOGICAL CLINICAL PROFILE OF DONORS OF ORGANS AND TISSUES AT A UNIVERSITY HOSPITAL OF PARANÁ

JOABE CANDIDO FERREIRA
ELIZABETH APARECIDA DE SOUZA
NELSI SALETE TONINI
ANÁLIA FIORINI OGURA
MARISTELA SALETE MARASCHIN

UNIPAR - Universidade Paranaense. Cascavel/PR, Brasil.
UNIOESTE – Universidade Estadual do Oeste do Paraná. Cascavel/Pr, Brasil
Joabe_ferreira@hotmail.com

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INTRODUCTION

Transplantation is the transfer of cells, tissues, organs, or body parts from the body of a person (donor) to another (recipient), in order to restore the function of the compromised organ / system, which until then would have been incurable (BRAZIL, 2016).

In Brazil, there is one of the largest public programs of organ and tissue transplant in the world, the National Transplantation System (NTS). It is present in 25 states of the country, through state transplant centers, with 548 health facilities, and 1376 authorized medical staff to perform this procedure (SANTOS, FONSECA, 2012).

NTS is the body responsible for the control and monitoring of organ and tissue transplants performed in Brazil. It is attributed to it the actions of political management, promotion of donation, logistics, accreditation of teams and hospitals that carry out these transplants; it also defines the financing, elaborates the ordinances that regulate the whole process, from the capture of organs to the follow-up of transplanted patients (BRAZIL, 1997).

The deceased donor is the individual diagnosed with Brain Death (BD) or post Cardiopulmonary Arrest (CPA), according to the specific resolution of the Federal Medical Council (CFM). This organ or tissue donation can only be authorized by a first-degree relative, adult, spouse, and if the successor line to the second degree is obeyed (FREIRE; VASCONCELOS and TORRES, 2015).

For the donation of organ or tissue postmortem to happen, family consent is verified by a member of the Intra-Hospital Commission of Organ and Tissue Donation for Transplantation (IHCOTDT), through a face-to-face interview held at the hospital institution where the patient is. With this, data from this interview is recorded in specific forms for further analysis and construction of indicators of productivity and health quality (CAPELLARO, et.al, 2014).

The data produced by IHCOTDT, besides being an indicator, is also operated to establish the profile of the clientele assisted by the team. In this way, it is understood that the systematization of the data contributes so that the service has results regarding the structure and the work processes performed, as well as the dissemination of the results from the committee's activities, for the internal community, competent bodies and population in general (FREIRE; VASCONCELOS and TORRES, 2015).

It is necessary to give importance on training health professionals involved in the donation process so that the loss of the potential donor is reduced and, on the other hand, the number of donation is increased. Consequently, the suffering of patients who remain on waiting lists is reduced (PESTANA, 2013).

In this context, the aim of this research was to outline the profile of effective donors of organs and tissues that occurred in the period of 2011 to 2015 at the Hospital Universitário do Oeste do Paraná / HUOP, located in the city of Cascavel / PR.

MATERIALS AND METHODS

This was a retrospective, documental study with quantitative analysis. In this sense, it was analyzed data from patients who became potential donors after cardiopulmonary resuscitation (CPR) and brain death (BD), from January 2011 to December 2015. Data collection happened in IHCOTDT at Hospital Universitário do Oeste do Paraná, located in the city of Cascavel – Paraná.

The research source was secondary data from IHCOTDT's internal records, related to donation of organs and tissues, which are recorded in specific forms of the commission. A total of 123 IHCOTDT internal records were analyzed. Of those, 43 are related to organ/tissue donation of donors diagnosed with BD, and 80 from tissue donors of CPA.

For data collection, an instrument in the form of a script was done. Data collection happened in September 2016, after approval of the Research Ethics Committee that Involves Human Beings, according to resolution number 1.641.998/2016, of the Universidade Paranaense/UNIPAR. Respecting the guidelines of Resolution 466 of 2012 (BRAZIL, 2012).

Data analysis was quantitatively performed, submitted to relative and absolute frequency analysis.

RESULTS AND DISCUSSION

During the study period, 123 records of organ/tissue donors were identified, of which 80 (65.04%) were of patients who became donors after cardiopulmonary arrest (CPA) (Charts I and II). Comparing the total amount of effective donors of the study site with the general number of donors in Brazil and the state of Paraná for the same period, it was seen that the IHCOTDT of the hospital studied contributed 0.34% and 4.95% of donations. The representative contribution of IHCOTDT of the referred place is small at state and national levels, however, the total amount of donors is greater than the states of Acre (n=27), Alagoas (n=21), Mato Grosso (n=8), Rondônia (n=36) and Sergipe (n=29), according to statistics presented by ABTO (ABTO, 2015).

Though, it is important to point out that these states present less economic, financial, logistic and human resources for the management of potential donors and their conversion into effective donors. Furthermore, it is important to note that the number of effective and organ donors could be even greater, but Mendes (2012, p.946) recalls that "[...] the lack of notification [...] and the failures in the maintenance of organs for abstraction still represent factors that obstruct the effectiveness of the donation".

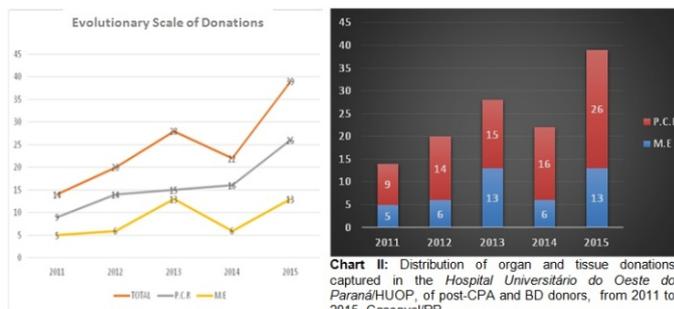


Chart I: Evolution of donations of organs and tissues on a general scale of donors. Post-CPA donors and BD donors collected at the Hospital Universitário do Oeste do Paraná/HUOP, from 2011 to 2015. Cascavel/PR. Source: Data collection instrument /Ferreira, 2016.

Chart II: Distribution of organ and tissue donations captured in the Hospital Universitário do Oeste do Paraná/HUOP, of post-CPA and BD donors, from 2011 to 2015. Cascavel/PR. Source: Data collection instrument /Ferreira, 2016.

Regarding the profile of the donors, it was seen that the patients were in average 44.4 (20.48) years old, whereas among those who were donors due to BD, the average age was 42.1 years and among those who became donors after CPA, the average was 46.1 years old. In this way, it is shown that the age group of the individuals in this study was higher than that presented by research participants carried out at Hospital de Clínicas de UNICAMP (RODRIGUES, et al., 2014), in which the mean age of the effective donors was 41.45 years, as well as the one observed in research in the state of Piauí, in which the mean age was 39.2 years old (SANTOS, BEZERRA and MELO, 2014).

As for the other characteristics of the socio-demographic profile of the subjects, it was found that there was a predominance of males, 86 (69.92%). 79 (64.23%) were white, 69 (56.56%) catholic, and 14 (11.48%) with complete primary education. It is also highlighted that in the educational variable, it was found 105 (86.07%) of data ignored.

Concerning the labor activity of the individuals, it was possible to observe that 58 (46.77%) of the charts evaluated did not present information related to the occupation of the donor. Of the most expressive labor activities, 19.35% related to other professions and 9.68% of household.

On this, it can be seen that the profile of the donors resembles, regarding gender and skin color, to other researches. For instance, it is observed in a study conducted in São Paulo (RODRIGUES, et al., 2014), as well as in a study carried out in Paraná (MACEDO and OLIVEIRA, 2013). Similarly, a research done in Ceará (AGUIAR, et al., 2010) has also presented the prevalence of males among the effective donors. However, in relation to skin color, the predominance was brown-skinned patients.

In this sense, it is inferred that the profile of the patients regarding gender and sex is connected to the profile of the Brazilian population, since according to the Brazilian Institute of Geography and Statistics (IBGE, 2009) there is a prevalence of individuals of white skin. Still as stated by IBGE (2009), there is also the predominance of women in the country. Despite this, Marinho; Cardoso and Almeida (2011) point out that the greater number of deaths in Brazil are among white men, which is why there is a greater number of effective donors with this profile. Besides, those individuals are more likely to die because of their work or social activity (SILVA et al., 2014).

The predominant religion was Catholicism and with elementary level of education. It is shown that these data are compared to the presented by Silva, et al., (2014) in a study developed at a public hospital in the west of Santa Catarina, in which the predominance was catholic donors and with low education. Still about the belief, a research carried out in the city of Curitiba/Paraná found out that the majority of the participants who declare to intend to be organ donors are also catholic, although they had completed higher education.

It should be noted that in the evaluated records, the fields related to data about religion, 44 (36.07%), profession 58 (46.77%), and schooling 105 (86.07%) were in blank, that is they were ignored when the patients' hospitalization records were being filled. Therefore, it is important to highlight that this information is of great relevance for in-depth analysis of factors that influence the process of organ and tissue donation.

The marital status of the donors was equal to single and married, with 42 (34.15%) for both. Related to the BD donors, 37.2% were single, and among the post CPA, 35% were married. In the research carried out at the Dante Pazzanese Institute of Cardiology (IDPC), 48.1% of effective donors were single (FUSCO, et al., 2009).

As to the place of hospitalization on the moment of death, it was found that the hospitalization in the emergency room was 65 (52.42%); the main cause of death was trauma, corresponding to 59 (47.58%); the place of residence of the individual with evolution to death predominated in the city of Cascavel/PR, consisting of 78 (62.90%). Even though it is a reference to other municipalities for care in the hospital under study, the city of Cascavel/PR is the one with the highest concentration of population, thus, it is possible to justify the predominance of death of resident donors in Cascavel/PR.

In the evaluation of medical records of donors by BD, the main results indicate that the majority of the hospitalizations occurred in the Adult Intensive Care Unit (ICU) (62.49%), also being trauma the main cause of death (48.84%), and Cascavel/PR as the main source (51.16%).

Examining the records of post CPA donors, it was observed that 65% of donors died in the emergency room and 47.50% had trauma as the cause of death. 70% of the CPA donors were from Cascavel/PR.

As regards the place of hospitalization of the patients, it should be noticed that most of the donors who evolved to CPA were in the emergency room of the referred hospital, since it is the gateway to critical patient's care. In many cases, due to the individual's condition, he/she develops to death before being transferred to ICU, the most appropriate place for intensive support.

However, it is important to notice that the number of ICU beds is often insufficient to meet the demand, so, such patients can remain in the emergency room for an extended period. It is stressed that the emergency room is not the most suitable place to support patients who become effective donors, since the physical and human resources, as well as the high turnover of patients in the place, may compromise the maintenance of organs and tissues' vitality until the time of collection.

In a study carried out in an Organ Search Organization of the state of São Paulo, it was identified that the ICU represented the main place of hospitalization of organ/tissue donors (51%), and the emergency room was the second sector with more numbers of hospitalization of the referred population (FUSCO, et. al., 2009).

Regarding the patients' cause of death, it was verified that the main cause observed in this study resembles to those presented in similar investigations. Aguiar, et. al., (2010), in Ceará, found out that traumas were the main causes of death among a group of effective donors, which represented 56% of the total, with only head traumas accounting for 52%.

Concerning the origin of donors, 78 (62.90%) were from the city of Cascavel and 33 (26.61%) of municipalities in the area covered by the 10th Regional of Health of Paraná (10o RS). It should be understood that the HUOP receives patients and is a reference for trauma and severe patient care for both the city of Cascavel and for the municipalities belonging to the 10th Health Regional of Paraná. However, it can be seen that some donors come from other municipalities, which seek care due to the urgency or the regulation of vacancies of other regionals.

FINAL CONSIDERATIONS

It is concluded that the remarkable advances in the organ donation process, which took place at the Hospital Universitário do Oeste do Paraná, since the implantation of IHCOTDT in the institution, have been gradually increasing.

It is believed that this research may contribute to the professionals involved in the organ donation process of the referred institution so they know the clientele attended, and that in the future they may improve their work activity. It is also necessary to popularize this theme, so that there is a wide discussion among families and society, and that the desire to be an organ and tissue donor may be respected by them.

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EPIDEMIOLOGICAL CLINICAL PROFILE OF DONORS OF ORGANS AND TISSUES AT A UNIVERSITY HOSPITAL OF PARANÁ

ABSTRACT: The aim of this study was to outline the profile of effective organs and tissues donors that occurred from 2011 to 2015 at Hospital Universitário do Oeste do Paraná, located in the city of Cascavel-Paraná. Data collection took place at the Intra-Hospital Commission of Organ and Tissue Donation for Transplantation (IHCOTDT) of the Hospital. It was a documental, retrospective study with quantitative analysis. Data was collected from documents of patients who became donors after cardiopulmonary arrest (CPA) and brain death (BD). As a result, 123 medical records from organ/tissue donors were identified, in which 80 (65.04%) were from patients who became donors after CPA, and 43 (34.96%) patients who completed the brain death protocol and became donors after acceptance of the family. The prevalence was higher in males (69.92%) in economically active age (average of 44.43 years old). Being Trauma the main cause of death (47.58%). 52.4% were hospitalized in the emergency room. It is concluded that after the implantation of IHCOTDT and the advances in the organ donation process in the Hospital Universitário do Oeste do Paraná, the number of donations has been growing gradually.

KEYWORDS: Organ donation, profile, death.

PROFIL CLINIQUE ÉPIDÉMIOLOGIQUE DES DONNEURS D'ORGANES ET DE TISSUS DANS UN HÔPITAL UNIVERSITAIRE DU PARANÁ

RÉSUMÉ: Cette étude a le but de retracer le profil des donneurs efficaces d'organes et de tissus survenus entre 2011

et 2015 à l'Hôpital Universitaire de l'Oueste du Paraná, situé dans la ville de Cascavel / Paraná. La collecte de données a eu lieu au sein de la Commission de intra-hospitalier d'organes et tissus pour transplantation (CIHDOTT) dudit hôpital. L' étude a été documentaire, rétrospective avec analyse quantitative. Les données ont été recueillies auprès de la documentation de patients devenus donneurs après un C'était un documentaire, étude rétrospective avec analyse quantitative. Les données ont été recueillies auprès de patients devenus donneurs après un arrêt cardio-respiratoire (ACR) et mort encéphalique (ME). Ainsi, 123 donneurs d'organes / tissus ont été identifiés, dont 80 (65,04%) étaient devenus des donneurs post-ACR et 43 (34,96%) avaient complété le protocole de mort cérébrale et sont devenus des donateurs après avoir été acceptés par la famille. La prévalence a été plus élevée chez les hommes (69,92%) avec l'âge économiquement actif (âge moyen 44,43 ans). La cause de la mort prédominante a été le Traumatisme (47,58%). Internés à l'urgence (52,4%). Il est conclu que les progrès dans le processus de don d'organes qui ont eu lieu à l'hôpital universitaire de l'Oueste du Paraná, depuis l'implantation de CIHDOTT dans l'institution, le nombre de dons a augmenté progressivement.

MOT CLÉS: Don d' organes, mort, profil.

PERFIL CLÍNICO EPIDEMIOLÓGICO DE LOS DONANTES DE ÓRGANOS Y TEJIDOS EN UN HOSPITAL UNIVERSITARIO DEL PARANÁ

RESUMEN: Este estudio tuvo como objetivo trazar el perfil de los donantes efectivos de órganos y tejidos ocurridos en el período de 2011 a 2015 realizadas en el Hospital Universitario del Oeste de Paraná, localizado en el municipio de Cascavel / Paraná. La recolección de datos ocurrió en el Comité Intra-Hospitalario de Donación de Órganos y Tejido para Trasplante (CIHDOTT) de dicho Hospital. Fue un estudio documental, retrospectivo con análisis cuantitativo. Las colectas de datos fueron retiradas en los documentos de pacientes que se convirtieron en donantes post-parada cardio respiratoria (PCR) y muerte encefálica (ME). En el caso de los pacientes que se han convertido en donantes de PCR y 43 (34,96%) de pacientes que han concluido el protocolo de muerte encefálica y si se han detectado los registros de donantes de órganos / tejidos, de los cuales 80 (65,04% se convirtieron en donantes tras la aceptación de la familia. La prevalencia fue mayor en el sexo masculino (69,92%) con edad económicamente activa (promedio de edad 44,43 años). La causa del óbito prevalente fue el Trauma (47,58%). Internados en la sala de emergencia (52,4%). Se concluye que son notorios los avances en el proceso de donación de órganos ocurridos en el Hospital Universitario del Oeste de Paraná, desde que fue implantada la CIHDOTT en la institución el número de donaciones viene creciendo gradualmente.

PALABRAS CLAVE: Donación de órganos, perfil, muerte.

PERFIL CLÍNICO EPIDEMIOLÓGICO DOS DOADORES DE ÓRGÃOS E TECIDOS EM UM HOSPITAL UNIVERSITÁRIO DO PARANÁ

RESUMO: Este estudo teve como objetivo traçar o perfil dos doadores efetivos de órgãos e tecidos ocorridos no período de 2011 a 2015 realizadas no Hospital Universitário do Oeste do Paraná, localizado no município de Cascavel/Paraná. A coleta de dados ocorreu no Comissão Intra-Hospitalar de Doação de Órgãos e Tecido para Transplante (CIHDOTT) do referido Hospital. Foi um estudo documental, retrospectivo com análise quantitativa. As coletas de dados foram retiradas nos documentos de pacientes que se tornaram doadores pós parada cárdio respiratória (PCR) e morte encefálica (ME). Como resultados foram identificados 123 prontuários de doadores de órgãos/tecidos, dos quais 80 (65,04%) eram de pacientes que se tornaram doadores pós PCR e 43 (34,96%) de pacientes que concluíram o protocolo de morte encefálica e se tornaram doadores após o aceite da família. A prevalência foi maior no sexo masculino (69,92%) com idade economicamente ativa (média de idade 44,43 anos). A causa do óbito prevalente foi o Trauma (47,58%). Internados na sala de emergência (52,4%). Conclui-se que são notórios os avanços no processo de doação de órgãos acontecidos no Hospital Universitário do Oeste do Paraná, desde que foi implantada a CIHDOTT na instituição o número de doações vem crescendo gradualmente.

PALAVRAS CHAVE: Doação de órgãos, perfil, morte.