

## 77 - PROFILE OF KIDNEY DONORS FROM THE TRANSPLANTATION CENTER OF RIO GRANDE DO NORTE

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### INTRODUCTION

Renal transplantation is an important therapeutic option for patients with Chronic Renal Failure (CRF), both from medical, social or economic perspective.

This treatment is indicated when there is end-stage CRF, with the patient on dialysis or even in pre-dialysis or pre-emptive (Wolfe et al, 1999).

Pre-emptive transplantation can be offered to all renal transplant candidates, particularly for diabetic patients, to reduce the incidence of vascular, cardiac, ocular and neurological complications typical of diabetes, and in children under the age of 10 years to avoid growth impairment, renal osteodystrophy, and, especially, the difficulties of dialysis (Berthoux, 1996).

About the type of donor, he can be a living relative, unrelated living donor or deceased. It is considered living donor the one related by blood kinship, in straight or collateral line until the fourth degree. The Law 10211 of March 23 2001, authorizes the transplant between spouses, but judicial authorization is needed in cases of living donors who do not fit the possibilities mentioned (BRAZIL, 2001; BRAZIL, 1997).

The deceased donor transplants in the country must conform to the Federal Decree No. 2268 of June 30 1997, which regulates the Federal Law 9434 of 4 February 1997. Through that decree where created the National Transplant System (SNT), centered in the Ministry of Health in Brasília, and the Centers of Notification, Procurement and Distribution of Organs (CNCDOs), in the regions and states, to develop the process of capture and distribution of organs, tissues and parts taken from the human body for therapeutic purposes (BRAZILIAN ASSOCIATION OF TRANSPLANTATION, 2009).

In Brazil, most kidney transplants are still performed with living donors' relatives, unlike other developed countries, in which the source of organs is preferably dead donors (BRAZILIAN ASSOCIATION OF TRANSPLANTATION, 2009).

Our objective in this study is to characterize the renal transplant patients in the state of Rio Grande do Norte by type of donor, sex and degree of kinship.

### METHODS

This is an exploratory study with quantitative and retrospective data, conducted in the outpatient of kidney transplant at the University Hospital Onofre Lopes, in Natal / RN. Data collection was performed in June 2009 using a semi-structured formulary. The study period comprised March 1998 to December 2008.

### RESULTS AND DISCUSSION

During the studied period 138 kidney transplants were performed, of which 71 (51.5%) with living donors and 67 (48.5%) with deceased donors, according to figure 1:

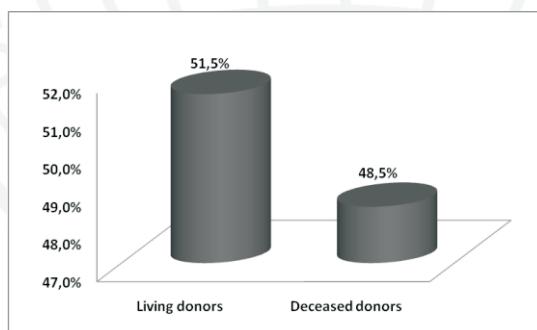


Figure 1. Distribution of renal transplant recipients according to donor type.

These results corroborate with the Brazilian Association of Transplantation (2009), which shows that in the three years prior to the enactment of Law 9434/97, 51% of kidney transplants were performed with living donors, increasing to 57% in the triennium 1998 to 2000. The use of live donor kidney, which was only 2% higher than the use of deceased donor kidney, increased to 14% after the promulgation of that law.

However, Bittencourt (2003) searching for a population of 1,000 chronic renal patients transplanted in the State of São Paulo, found that 62% of patients received kidneys from deceased donors and 38% of living donors. This fact is justified by the fact that the greatest number of deceased donors in Brazil is in São Paulo.

For the 71 living related donors, 46 (65%) were female and 25 (35%) male. The data obtained by D'Angeles (2009) were similar to ours, with a predominance of females (58%). In the study by Teixeira et al (2005), the number of men and women were similar.

The prevalence of (living) female donor and male recipients is a phenomenon that is not clearly justified in the literature. It is observed more frequently in living donation from mother to children, sisters to siblings and of wives to their husbands. The blood connection with the possibility of better compatibility, the status of the living donor and issues related to gender could perhaps explain the tendency of women in the act of donation (PERES, et al. 2003).

The age group was predominant among 20 to 29 years (28.3%) followed by 40 to 49 years (21%).

Teixeira et al (2005) surveyed a sample of 60 kidney donors and found an older population, with a more frequent

incidence between 30 to 49 years. D'Angeles (2009) found an average age of 32 years.

With regard to the degree of kinship, we observed that 33 (46.5%) were siblings, 17 (24%) mothers, 9 (12.5%) children, 04 (5.5%) parents, 02 (3.0 %) aunts and 02 (3.0%) cousins. There were also 04 (5.5%) living unrelated donors who donated to their wives. As can be seen in Figure 2:

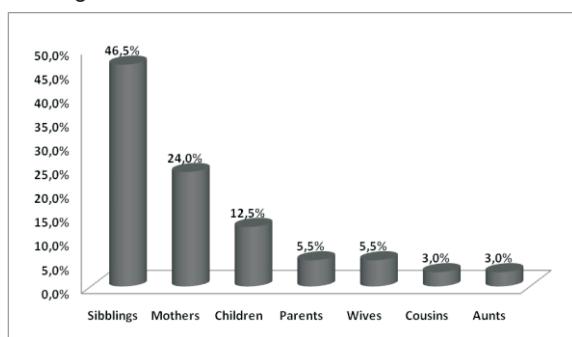


Figure 2. Distribution of renal transplant recipients according to the degree of donor relationship.

In the study by Coelho et al (2005) on liver transplant, he obtained different data, showing the children as the main donor, followed by parents and siblings.

### CONCLUSION

In eleven years of operation of the unit, were performed 138 kidney transplants, making it possible to realize the dream of these people to get out of dialysis. Despite the huge and growing waiting list for organs from deceased donors, most of the procedures(51.5%) was with organs of living related donors, the vast majority of these were female (65%), followed by mothers (24%), probably because they are more involved emotionally and monitoring closely the suffering of their loved ones on the waiting list for a kidney.

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**PROFILE OF KIDNEY DONORS FROM THE TRANSPLANTATION CENTER OF RIO GRANDE DO NORTE**

Renal transplantation is an important therapeutic option for patients with Chronic Renal Failure (CRF), both from medical, social or economic perspective. This treatment is indicated when there is end-stage CRF, with the patient on dialysis or even in pre-dialysis or pre-emptive. Our objective in this study is to characterize the renal transplant patients in the state of Rio Grande do Norte by type of donor, sex and degree of kinship. This is an exploratory study with quantitative and retrospective data, conducted in the outpatient of kidney transplant at the University Hospital Onofre Lopes, in Natal / RN. During the studied period 138 kidney transplants were performed, of which 71 (51.5%) with living donors and 67 (48.5%) with deceased donors. For the 71 living related donors, 46 (65%) were female and 25 (35%) male. The age group was predominant among 20 to 29 years (39%). With regard to the degree of kinship, we observed that 33 (46.5%) were siblings, 17 (24%) mothers, 9 (12.5%) children, 04 (5.5%) parents, 02 (3.0%) aunts and 02 (3.0%) cousins. There were also 04 (5.5%) living unrelated donors who donated to their spouses. We conclude that despite the huge and growing waiting list for organs from deceased donors, most of the procedures(51.5%) was with organs of living related donors, the vast majority of these were female (65%), followed by mothers (24%), probably because they are more involved emotionally and monitoring closely the suffering of their loved ones on the waiting list for a kidney.

**KEY WORDS:** organ donation; transplantation; nursing.

**PROFIL DES DONNEURS DE REIN CENTRE DE GREFFES DE RIO GRANDE DO NORTE**

La transplantation rénale est une option thérapeutique importante pour les patients atteints d'insuffisance rénale chronique (IRC), tant d'un point de vue médical, social ou économique. Ce traitement est indiqué quand il ya fin du FRC stade, le patient en dialyse ou même en pré-dialyse. Notre objectif dans cette étude pour caractériser les receveurs de greffe rénale à partir de Rio Grande do Norte, sur le type de donneur, le sexe, l'âge et le degré de parenté. Il s'agit d'une étude exploratoire avec des données quantitatives et rétrospective, réalisée en ambulatoire la transplantation rénale à l'Hospital Universitário Onofre Lopes au Natal / RN. Au cours de la période d'études ont été réalisées 138 transplantations de reins, dont 71 (51,5%) des donneurs vivants et 67 (48,5%) avec des donneurs décédés. Pour les 71 donneurs vivants liés, 46 (65%) étaient des femmes et 25 (35%) de sexe masculin. Le groupe d'âge était prédominante chez les 20 à 29 ans (39%). En ce qui concerne le degré de parenté, nous avons observé que 33 (46,5%) étaient des frères et sœurs, 17 (24%) des mères, 9 (12,5%) enfants, 04 (5,5%) des parents, 02 (3, 0) tantes et 02 (3.0) cousins. Il y avait aussi 04 (5,5%) donneurs vivants non apparentés qui ont fait don à leurs conjoints. Nous concluons que, malgré l'énorme et croissante liste d'attente pour les organes de donneurs décédés, la plupart des procédures était de 51,5% avec les organes de donneurs vivants apparentés, la grande majorité de ces 65% étaient des femmes, suivis par les mères (24%), probablement parce qu'ils sont plus impliquées émotionnellement et suivre de près la souffrance de leurs proches sur la liste d'attente pour un rein.

**MOTS CLÉS:** Don d'organes, Transplantation; Soins infirmiers

**PERFIL DE LOS DONANTES DE RIÑONES DEL CENTRO TRASPLANTADOR DEL RIO GRANDE DO NORTE**

El trasplante renal es una importante opción terapéutica para los pacientes con insuficiencia renal crónica (IRC), tanto desde el punto de vista médico, el social o económica. Este tratamiento está indicado cuando hay IRC terminal, con el paciente en diálisis o en pre diálisis. Objetivamos en este estudio caracterizar los receptores de trasplante renal de Rio Grande do Norte, en el tipo de donante, sexo, edad y grado de parentesco. Este es un estudio exploratorio y descriptivo con datos cuantitativos y retrospectivo, realizado en el ambulatorio de trasplante renal en el Hospital Universitario Onofre Lopes en Natal / RN. Durante el período de estudio se realizaron 138 trasplantes renales, de los cuales 71 (51,5%) de donantes vivos, y 67 (48,5%) con donantes fallecidos. De los 71 donantes vivos relacionados, 46 (65%) eran mujeres y 25 (35%) hombres. El grupo de edad predominante fue entre 20 a 29 años (39%). Con respecto al grado de parentesco, se observó que 33 (46,5%) eran hermanos, 17 (24%) las madres, 9 (12,5%) hijos, 04 (5,5%) de los padres, 02 (3, 0) tíos y 02 (3.0) primos. También hubo 04 (5,5%) de donantes vivos no relacionados que donó a sus cónyuges. Se concluye que a pesar de la enorme y creciente lista de espera para órganos de donantes fallecidos, la mayoría de los procedimientos fue de 51,5% con órganos de donantes vivos relacionados, la gran mayoría de estos 65% fueron mujeres, seguidas por las madres (24%) probablemente porque están más implicados emocionalmente y seguir de cerca el sufrimiento de sus seres queridos en la lista de espera para un riñón.

**PALABRAS CLAVE:** donación de órganos; trasplante; enfermería.

**PERFIL DOS DOADORES RENAIOS DO CENTRO TRASPLANTADOR DO RIO GRANDE DO NORTE**

O transplante renal é uma importante opção terapêutica para o paciente com Insuficiência Renal Crônica (IRC), tanto do ponto de vista médico, quanto social ou econômico. Esse tratamento está indicado quando houver IRC em fase terminal, estando o paciente em diálise ou mesmo em fase pré-dialítica. Objetivamos nesse estudo caracterizar os transplantados renais do Rio Grande do Norte, quanto ao tipo de doador, sexo, idade e grau de parentesco. Trata-se de um estudo exploratório descritivo com abordagem quantitativa e dados retrospectivos, realizado no ambulatório de transplante renal do Hospital Universitário Onofre Lopes em Natal/RN. No período estudado foram realizados 138 transplantes renais, dos quais 71 (51,5%) com doadores vivos e 67 (48,5%) com doadores falecidos. Em relação aos 71 doadores vivos relacionados, 46 (65%) eram do sexo feminino e 25 (35%) masculino. Quanto à faixa etária, predominou entre 20 a 29 anos (39). No que se refere ao grau de parentesco, observamos que 33 (46,5%) eram irmãos, 17 (24%) mães, 9 (12,5%) filhos, 04 (5,5%) pais, 02 (3,0) tíos e 02 (3,0) primos. Houve também 04 (5,5%) doadoras vivas não relacionadas que doaram para seus esposos. Concluímos que apesar da enorme e crescente fila de espera por órgãos de doadores falecidos, a maioria dos procedimentos 51,5% foi com órgãos de doadores vivos relacionados, destes a grande maioria 65% do sexo feminino, seguido das mães (24%) provavelmente por estarem mais envolvidas emocionalmente e acompanharem de perto o sofrimento de seus entes queridos na fila de espera por um rim.

**PALAVRAS-CHAVE:** doação de órgãos; transplante; enfermagem

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