

**DRUG UTILIZATION IN RENAL TRANSPLANT PATIENTS:
MEDICATION PRACTICES AND REPRESENTATIONS**Guilherme Oliveira de ARRUDA^a, Rogério Dias RENOVARO^b**ABSTRACT**

Qualitative research approach, descriptive and exploratory with objective of to know the practices and representations of medication on the use of drugs by people transplanted kidney. 18 people participated in the Dourados (MS), through semi-structured interview. The theoretical contributions of medication practices were Peter Conrad and representation of Stuart Hall. The definition of the categories of theoretical analysis was Michel Foucault. Respondents had a mean age of 53.5 years, 13 males and 5 females, with median time to transplant eight years. The medications predominantly used were immunosuppressive. We developed three categories of analysis: the drug as part of everyday life, the central role of the drug and correlation with rejection, and medicine and the autonomy of the transplanted kidney. The drugs are part of everyday life and the representations of autonomy and quality enhance your daily use.

Descriptors: Drug utilization. Kidney transplant. Immunosuppression.

RESUMO

Pesquisa de abordagem qualitativa, descritiva e exploratória, com o objetivo de conhecer as práticas de medicação e representações sobre o uso de medicamentos por pessoas transplantadas renais. Participaram 18 pessoas, no Município de Dourados (MS), por meio de entrevista semiestruturada. Os aportes teóricos foram práticas de medicação de Peter Conrad e representação de Stuart Hall. A definição das categorias de análise teve como referencial teórico Michel Foucault. Os entrevistados apresentaram idade média de 53,5 anos, sendo 13 do sexo masculino e cinco do sexo feminino, com tempo médio de transplante de oito anos. Os medicamentos predominantemente utilizados foram os imunossupressores. Elaboraram-se três categorias de análise: o medicamento como parte do cotidiano; o papel central do medicamento e a correlação com a rejeição; e o medicamento e a autonomia do transplantado renal. Os medicamentos fazem parte do cotidiano, e as representações sobre autonomia e qualidade reforçam seu uso diário.

Descritores: Uso de medicamentos. Transplante de rim. Imunossupressão.

Título: Uso de medicamentos em transplantados renais: práticas de medicação e representações.

RESUMEN

Un enfoque de investigación cualitativa, descriptiva y exploratoria, con el objetivo de conocer las prácticas y representaciones de la medicación en el uso de fármacos por las personas trasplantadas de riñón. 18 personas participaron en Dourados (MS), a través de entrevista semiestructurada. Aportes teóricos de prácticas de medicación fueron Peter Conrad y representación de Stuart Hall. La definición de las categorías de análisis teórico fue Michel Foucault. Los encuestados tenían edad promedio de 53,5 años, 13 varones y 5 mujeres, tiempo promedio de trasplante de ocho años. Los medicamentos que se utilizan son principalmente inmunosupresores. Hemos desarrollado tres categorías de análisis: drogas como parte de la vida cotidiana, el papel central de la droga y la correlación con el rechazo, y la medicina y la autonomía del riñón trasplantado. Las drogas son parte de la vida cotidiana y las representaciones de autonomía y calidad de mejorar su uso diario.

Descriptorios: Utilización de medicamentos. Trasplante de riñón. Inmunosupresión.

Título: Utilización de medicamentos en pacientes con trasplante renal: las prácticas de los medicamentos y representaciones.

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INTRODUCTION

Kidney transplants, as alternatives for chronic kidney disease, were the pioneers among the other techniques of organ transplantation; the first successful transplantations were performed in the 1950s in Boston. Currently, these procedures have a high success rate ⁽¹⁾.

Most patients with end-stage renal disease may choose the kidney transplantation as a treatment, due to their desire to avoid dialysis or improve their quality of life, because they believe that they can live a normal life. During the post-transplant period, patients who are undergoing kidney transplantation should use immunosuppressive medicines, which prevent or treat the rejection of the transplanted organ, known as the major cause of graft loss ⁽²⁾.

Regarding the importance of medicines for kidney transplant recipients, knowing the representations they have, can take in evidences of their adherence or non-adherence to treatment. It is known that non-adherence has a decisive role in the impaired function and graft loss, which contributes to 20% of acute rejections and 16% of graft losses ⁽³⁾.

The medicines which are most commonly used in outpatient treatment of post-transplant are the immunosuppressants, used in 100% of patients, 51.7% of whom made use of antihypertensive drugs. Diuretics, antibiotics, vitamins and antacids are also prescribed. The immunosuppressive drugs commonly used are: Cyclosporine, Prednisone, Tacrolimus, Mycophenolate Mofetil and Rapamycin⁽⁴⁾.

These drugs lead the patient to the immunocompromised condition, which implies the adoption of rules and decisions imposed by the medical regime. It is identified thus the need to know the practices and attitudes that permeate the relation individual-medication ⁽⁵⁾.

A study of systematic review of qualitative studies focused on drug therapy in renal transplant recipients found only seven studies that addressed this issue, including methodological approach, involving altogether 207 participants ⁽⁶⁾. When we consider the attitudes of patients, their priorities, expectations, everyday events, commitments and support system from the health service, one can get a better understanding of the treatment by patients and hence greater adhesion. This con-

clusion justifies conducting research along these lines which show the utterances of the kidney transplant recipients ⁽⁶⁾.

Assuming that the immunosuppressive are essential medicines in post-transplant therapy of patients with renal disease, that the use of medicines is also social and cultural practices permeated by representations, and that there is a limited number of qualitative studies, the objective of this study is to know the medication practices and the representations of patients who underwent kidney transplants over the use of medicines.

METHOD

This is a qualitative, descriptive and exploratory research, developed in the city of Dourados (MS) with 18 renal transplant recipients. The inclusion criteria were: being a renal transplant recipient who lives in the city of Dourados, contacted through the Association of Chronic Renal Patients and Transplant Recipients of Dourados (Renassul). The exclusion criteria were: renal transplant recipients who live in other cities, hospitalized ones, or foreigners who does not understand nor speak Portuguese. There were 35 attempts at telephone contact with the renal transplant recipients, yet only 18 took part in the study, because the content of the interviews met the concept of sample's saturation ⁽⁷⁾.

The sampling process by theoretical saturation reduces the subjectivity of the criteria used for determining the sample and allows you to know when the interaction between researcher and field research fails to provide information that give continuity to the theorization of the study ⁽⁸⁾. As a method of data collection, it was used the semi-structured interview.

The interviews were recorded and transcribed; to delimitate categories of analysis, we approached Michel Foucault's theoretical framework on discourse and enunciation, whose perspective is, above all, to refuse unequivocal explanations, easy interpretations and also the persistent search for the ultimate meaning or the hidden meaning of things⁽⁹⁾.

The definition of categories of analysis, in Foucault's perspective, was based on four main elements: reference to something that we have identified, the fact of having an individual or someone

who can actually affirm that, and the fact that the statement does not exist in isolation but associated with other discourses, and the materiality of the enunciation⁽¹⁰⁾.

Theoretical frameworks that underlie the analysis were the concept of medication practices from Peter Conrad and the concept of representation proposed by Stuart Hall. According to the conception of medication practices from Peter Conrad, the act of taking medicines involves much more than the physical ingestion of pharmaceutical substances for therapeutic purposes. These medication practices are intertwined with cultural dimensions of identity and body, health and disease, effectiveness and responsibility^(11,12).

From this perspective, centered on human beings, I do not intend to focus only on the verification of therapeutic adherence, but also on those interpretations that these human beings make regarding such therapeutic objects as well as to know how they manage their medicines and give visibility to these practices⁽¹¹⁾.

This extended look over the use of medication when approaching the concept of representation from Stuart Hall, for whom language works by representation, i.e., cultural meanings have real effects and regulate social practices. Recognition of these meanings enables us to understand life experiences, contributes to identities' formation and challenges us to occupy positions constructed on discursive practices⁽¹³⁾.

Through a superficial reading and a subsequent immersion in the text resulting from discourses, we sought to analyze the enunciations as events situated in time and place of the individuals, as well as language built through their life experiences⁽¹³⁾. Revealed Medication practices and representations enabled the categorization of analysis in which enunciation's references to human beings and relationships with the use of medications are associated with the utterance of their peers, reinforcing interpretations⁽¹⁰⁾ that individuals have about therapy in everyday life.

The present study derives from the Scientific Initiation Project funded by the National Council of Technological and Scientific Development (CNPq) and followed the recommendations of Resolution No. 196/96 of the CNS. The project was submitted to the Ethics Committee in Research from the Federal University of Mato Grosso do Sul, registered

under the number of approval protocol 1936/2011 and CAAE 0091.0.049.000-11.

RESULTS

Characterization of the Respondents

The study included 18 renal transplant recipients living in Dourados. The average age of respondents was 53.5 years old, whereas 13 were men. Most individuals were married, with predominantly Secondary and Higher Education. The time of transplantation shown was quite variable, from 26 to 204 months, and grafts from living donors were the most common ones (see Table 1).

Regarding the most used medications by transplant recipients, we found the use of immunosuppressive drugs and those related to cardiovascular disorders and metabolic diseases. Among the immunosuppressive drugs, the most used were Prednisone (12) Mycophenolate Sodium (10), Cyclosporine (6), Tacrolimus (5), Mycophenolate Mofetil (4), Azathioprine (4), Sirolimus (2) and Everolimus (1). The number in parentheses refers to the number of patients using the cited product.

Through the interviews, we identified three categories of analysis: drug as part of everyday's life, the central role of the drug and the correlation with the rejection, the medicine and the autonomy of the renal transplant recipient.

Medicine as part of everyday's life

Regarding their uses, renal transplant medications are incorporated into everyday tasks of such patients, among other commitments. In the course permeated by the transplant recipient, from the time immediately after surgery until the present time, they realize that making use of medicines in certain dosing regimens is a practice that sounds natural.

Now I know that I should not be without taking them every day. This one is sacred (R1).

[...] I had the time since the hospital; I obeyed that time until today. I take them all: I take the cyclosporin dose of 75 mg daily in the morning, and I take Myfortic® three times a day, dose of 500 milligram every 8 hours; and the 7.5 prednisone, once a day, and razilez® 150 also once daily (R2).

Table 1 – Characteristics of the Renal Transplant Recipients, Dourados. 2011.

| Respondent | Age (years) | Marital Status | Education level | Time of Transplantation | Type of Donor |
|------------|-------------|----------------|----------------------|-------------------------|---------------|
| R1 | 63 | Married | Secondary Education | 48 months | Alive |
| R2 | 67 | Married | Higher Education | 135 months | Corpse |
| R3 | 60 | Divorced | I.E.E.* | 67 months | Corpse |
| R4 | 55 | Widow | I.E.E.* | 42 months | Corpse |
| R5 | 48 | Married | Secondary Education | 132 months | Alive |
| R6 | 46 | Married | I.H.E.** | 60 months | Alive |
| R7 | 50 | Married | I.E.E.** | 88 months | Alive |
| R8 | 52 | Married | Secondary Education | 204 months | Alive |
| R9 | 67 | Married | Higher Education | 113 months | Corpse |
| R10 | 66 | Divorced | Elementary Education | 166 months | Alive |
| R11 | 43 | Married | Secondary Education | 114 months | Alive |
| R12 | 53 | Married | Elementary Education | 26 months | Alive |
| R13 | 56 | Married | Secondary Education | 156 months | Alive |
| R14 | 44 | Married | Higher Education | 130 months | Alive |
| R15 | 55 | Widower | Secondary Education | 56 months | Corpse |
| R16 | 58 | Married | Secondary Education | 108 months | Alive |
| R17 | 45 | Married | Secondary Education | 108 months | Alive |
| R18 | 35 | Married | Secondary Education | 96 months | Alive |

*Incomplete Elementary Education; **Incomplete Higher Education.

So, from the first day that we've been teaming up to it and the best possible way. I take it at 8 am and 8 pm. So that's a habit. If I go out, I take it with me and if I see it's a time that I will not return home or if I travel, I take all the medication with me. It's rare to spend a day or half a day without this medication, so now it is kind of natural in my daily life (R6).

In this utterance, R6 explains that when it is necessary to travel, he or she is organized, so that he or she can use their medications, without letting such fact change his or her routine. Thus, we constructed an organization strategy focused on medicines, suggesting the natural character that medication's use took on his or her daily life. These organization's strategies were perceived in other speeches throughout the study.

You see, here I have the times [showing a current list of medications] right times, Here I have the dosages, here I have the nomenclature, these times and these dosages, whatever orally or by injection, it is performed (R9).

I have an organized box (R4).

R4 has a small plastic box with small screens, which allocates the units of medicine that he or

she needs to ingest, all organized by day and time. Besides these organizational strategies perceived, respondents also present tactics most directly related to the use of medications that ease the administration of medications.

[...]I take them with a glass of milk, I never take them with water because milk helps me, it creates a wall in your stomach, then, after taking them, I eat something like a cracker, a piece of bread, because when the capsules open in my stomach, It is important to have something inside it and the stomach is protected; so I believe that if you take it that way it will not hurt for you (R7).

The organizing strategies and tactics of use are embedded in renal transplant recipients' **everyday life** as medication practices.

The central role of medicines and their correlation with rejection

Renal transplant recipients clearly expressed the need for medication; meanwhile strategies arise to ensure access to medication and avoid its lack and the possible risks that it can cause. They want to get

away from the lack of medicine and communicate with health professionals (nurse, doctor) or an acquaintance who is also a transplant recipient and who uses the same medication, requesting help from them, or even striving to seek medication in other states that provide the necessary amount of medicine.

[...] I still have the medicines, so... a box more, even a nurse from the clinic there that brought those to me, I've never run out of them, thank God (R4).

[...] I'd have to be taking the amount of three medicines, but they do not produce them, I'm getting only sixty tablets of this medicine, which would be two tablets a day, so as I am attended in São Paulo, São Paulo has given me a box more. It would have to be here to give me these ninety tablets, but it is said that they have an ordinance that can only allow sixty to Mato Grosso do Sul (R11).

[...] Something happens to run out of medication, we get a day or two without taking, hence, if we see that it will take a long time to come the medicines, we go to a friend who is transplanted and borrow them, and when they comes to us, we return to this friend (R15).

Health care support for transplant recipients also influences his/her attitudes toward the need for medication. According to them, sometimes they need to leave their origin town to get monitoring in other places, because they need skilled professionals, attitudes that were perceived in their utterances.

From the doctors here today, there's nobody that attends post-transplantation [...]. (R5).

In this constant quest for access to the medication, the transplant recipient sees himself or herself motivated by the fact that, if not carrying out the proper use of medication, the situation can cause serious consequences, as body rejection of transplanted organs, although they have to resist the occurrence of adverse drug reactions.

[...] we read its label, when you read, it makes you afraid to take it because it has side effects, what to speak, what to say and stuff, it makes you afraid to take it, but as people say: it is a necessary evil, You can't be without it. So you need it to reject... (R6).

[...] I'm with something that isn't mine and my body and the tendency is to throw it out, reject it, reject it because it is something that is not mine, but thanks to medica-

tion, so if you don't take this drug, the tendency of the body is to reject it and you may lose that graft (R14).

If I stop taking it, there will be a rejection, this is part of my daily life. (R16).

Thus, the role of medication is presented as central, accounting practices and representations of prominence in renal transplant recipients' lives that permeate their utterances speeches. Medications are sustaining life's artifacts, conquered after transplantation.

It represents life. Otherwise you die. The medication is everything in the life of a patient (R5).

It represents, therefore, represents life, I know that if I stop taking it I will lose the kidney, and if I lose the kidney, I will suffer again, and I can die (R17).

Drugs and the autonomy of renal transplant recipients

Drug is also correlated to quality of life after transplantation, since it replaces the dialysis machine through the graft, which guarantees prolonged renal functioning and thus enables autonomy. Therefore, the adverse drug reactions become bearable given the risk of dialysis's need.

So, as I said, the quality of life is better than a dialysis, you get rid of the machine, you are free, you have your everyday life (R6).

[...] we have this issue of the reaction to the use of drugs, but nothing is more difficult than the dialysis machine, it is better tablets than the machine (R14).

[...] Then, well: now the medication is wonderful; it is like gold to me, anything but dialysis. So for me, the medication is everything now, like I said, my survival. I'd rather take 50 pills per day than doing half-hour dialysis (R18).

DISCUSSION

It is important to emphasize the lack of qualitative studies on the use of drugs in renal transplant recipients performed in Brazil. Currently, upon review works, it is known that such studies have been published only in countries like USA, UK and Australia, which confirms the need for making profound studies on discussions regarding the subject ⁽⁶⁾,

treating drug use as a practice that brings up representations historically constructed⁽¹⁴⁾.

Regarding research individuals' profile, there was a similar finding in an American study with 19 participants, which found 52.8 years old as the average age, among people of 43-67 years old⁽¹⁵⁾. The same study also showed 13 participants who received the transplanted organ from living donors, as well as the frequent use of immunosuppressive drugs⁽¹⁵⁾.

In the study, it was found that the use of medicines is clearly inserted in renal transplant recipients' daily life. Thus, medication practices are generated and they are focused on medicines' organization and tactics to use them. Medication use is a daily habit that brings a series of advantages, such as feeling better, keeping kidney's functionality, remaining without dialysis's need and reducing rejection risks, which, according to another study, is considered a key insight into treatment control⁽¹⁶⁾.

From this perspective, knowing and understanding medication practices allows us to understand these humans' roles regarding drug prescriptions in the paths permeated since transplantation⁽¹⁰⁾. Medication practices are permeated by strategies from which renal transplant recipients try to optimize the medicines' use, facing forgetfulness, discomfort or disorganization, while following the dosage prescribed by the healthcare professional.

Problems are overcome as patients develop their own methods to ensure regularity in compliance to therapy, including: keep the drugs in visible places, putting signals to facilitate their location, using boxes for medicines, developing the habit of taking them with meals or even associate them to other objects that refer to usual things⁽¹⁵⁾.

These practices were observed in both transplant recipients with periods of post-transplant over 25 years⁽¹⁵⁾ and in transplant recipients who underwent the procedure in less than six months⁽¹⁷⁾. However, the usual relationship with the drug is most pronounced in patients with a longer time of transplantation. Overall, strategies were established from their representations.

Small strategies perceived in relation to organization and access to medicines facilitate their appropriate use and collaborate for their adherence to therapy. It is important to consider that in Brazil immunosuppressant drugs are offered by Unified

Health System (SUS). Such drugs are expensive and have their prescription, dispensing and monitoring defined by clinical protocols from the Health Ministry⁽¹⁸⁾, which permeates access strategies.

Therefore, in individuals' discourses, we perceived tensions over the fear of not getting the drugs, which led him or her to develop tactics to ensure access and prevent the risk of graft loss. This unique finding, and not reported in other studies, may reflect the mismatch in regards to care organization on a local level, and thus trigger coping strategies by these individuals when maintaining their lives and the autonomy achieved by transplantation.

Following such line of reasoning, representations regulate social practices such as proper use of medications. Thus, representation involves practices of meaning through which one can understand life experiences, which are specific and endowed with historicity⁽¹³⁾.

It is evident that drugs are not only chemicals, but social and cultural entities. We must highlight the respondents' utterances in the centrality of immunosuppressive drugs in their lives. Thus, such representations reinforce that drugs are endowed with multiple dimensions, impregnated with meanings in unique contexts and situations⁽¹⁹⁾.

Respondents are emphatic when noting that they prefer drug using in post-transplant period rather than returning to dialysis' machines, from which they do not have good memories. They recognize that the transplant has restored important aspects of their lives, like freedom and the ability to perform daily life activities. These findings converge to another study, in which transplant recipients reported restriction reductions in their daily lives, as well as more energy to perform simple tasks⁽²⁰⁾.

This past experience permeates how renal transplant recipients are using drugs today. It is assumed that transplantation offers quality and life opportunities by reducing chances of a re-transplantation and disapprovals from health professionals⁽⁶⁾.

Thus, renal transplant recipients also strive to overcome adverse effects stemming from the use of medication. Although they cannot avoid them, attempts to control and acceptance, regarding adverse reactions, are successful. They allow, this way, achieving continuous drug therapy and

the maintenance of their benefits to transplant recipients' lives ⁽²¹⁾.

CONCLUSION

This study was the prospect of knowing discourses about drug using in renal transplant recipients while it considers particularities of sampling and researching scenarios. On the other hand, lack of qualitative studies, related to the topic, led to this research, as in Brazil, unlike other countries, the access to immunosuppressive medications is guaranteed by SUS.

Thus, medications, especially immunosuppressive drugs, are perceived as vital in the treatment of transplant recipients, because they represent a strong centrality in line to naturalization processes related to use. Drugs using brings a sense of quality of life, protection, autonomy and, why not, of freedom, especially when the transplant recipient correlates this practice with the existing risk related to transplanted kidney's rejection.

Results in the current study showed that the practice of medication is strongly tied to maintenance of life, however, the need for more adequate assistance and fears regarding the access to immunosuppressive drugs corroborate the urgency in establishing effective care lines in post-transplant period, particularly in local scenarios of health care, alleviating tensions and worries.

We conclude that studies on experience with drugs, as something broad and imbued with multiple meanings, help us to understand and comprehend their meanings, to find their needs and realize their tactics and coping strategies, which may contribute to a practice closer to these patients' reality.

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