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PESQUISA

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# Utilization of immunosuppressants by people with renal transplant<sup>1</sup>

Utilização das medicações imunossupressoras pelas pessoas com transplante renal

Utilización de las medicaciones inmunosupresoras por las personas con trasplante renal

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#### ABSTRACT

**Objective:** To analyze the use of immunosuppressants for people with renal transplant. **Methods:** A qualitativedescriptive approach was used, conducted with 20 people that underwent renal transplant, in the period from May to July 2013. The data collection was done through semi-structured interview and used the thematic analysis. **Results:** Ten men and ten women participated, age between 30 and 66 years, mostly of the white race, catholic, married, with incomplete primary education and retired. Three categories were identified: routine use of immunosuppressants; presence of side effects of immunosuppressants; and dispensing of immunosuppressants. **Conclusion:** The study presents singularities of the dependents' experience of an ongoing drug treatment, therefore providing theoretical subsidies that may qualify the care practices aimed at people living in the dependence of these drugs.

Descriptors: Chronic renal insufficiency; Kidney transplantation; Immunosuppressive agents; Nursing.

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#### RESUMO

**Objetivo:** Analisar a utilização de imunossupressores pelas pessoas com transplante renal. **Métodos:** Utilizou-se abordagem qualitativa do tipo descritivo, realizado com 20 pessoas transplantadas renais, no período de maio a julho de 2013. A coleta de dados ocorreu por meio de entrevista semiestruturada e utilizou-se a análise temática. **Resultados:** Participaram dez homens e dez mulheres, com idade entre 30 e 66 anos, a maioria da raça branca, católica, casada, com ensino fundamental incompleto e aposentada. Foram identificadas três categorias: rotina do uso das medicações imunossupressoras; presença dos efeitos colaterais das medicações imunossupressoras: O estudo apresenta singularidades da experiência de pessoas dependentes de um tratamento medicamentoso contínuo, portanto, fornece subsídios teóricos que poderão qualificar as práticas de atenção direcionadas a quem vivencia a dependência destes medicamentos.

**Descritores:** Insuficiência renal crônica; Transplante De Rim; Imunossupressores; Enfermagem.

#### RESUMEN

**Objetivo:** Analizar la utilización de inmunosupresores por las personas con trasplante renal. **Métodos:** Utilizó abordaje cualitativa del tipo descriptivo, realizado con 20 personas trasplantadas renales, en el período de mayo a julio de 2013. La recolección de datos ocurrió a través de entrevista semiestructurada y utilizó el análisis temático. **Resultados:** Participaron diez hombres y diez mujeres, con edades entre 30 y 66 años, la mayoría de la raza blanca, católica, casada, con educación fundamental incompleto y jubilada. Fueran identificadas tres categorías: rutina de lo uso de las medicaciones inmunosupresoras; presencia de los efectos secundarios de las medicaciones inmunosupresoras; y dispensación de las medicaciones inmunosupresoras. **Conclusión:** El estudio presenta singularidades de la experiencia de personas dependientes de un tratamiento medicamentoso continuado, por lo tanto, fornece subsidios teóricos que pueden calificar las prácticas de atención direccionadas a quien vivencia la dependencia de estos medicamentos.

**Descriptores:** Insuficiencia renal crónica; Trasplante de riñón; Inmunosupresores; Enfermería.

### INTRODUCTION

Renal failure, chronic, progressive and irreversible, or acute, sometimes accompanied by death, has always haunted the expectations of clinicians and researchers.<sup>1</sup> Therefore, to avoid this fatality, there are some substitute therapies for the treatment of chronic renal failure (CRF) such as hemodialysis and peritoneal dialysis, however, renal transplantation is the preferred choice of many people, enabling an improvement in the quality of life and avoiding dependence on dialysis.<sup>2</sup> It is believed that the life of people with CRF, when fully transplanted, improved, especially those that had previously undergone dialytic treatment.<sup>3</sup>

At the global level, Brazil has one of the largest public health systems, in which the transplantation process and its maintenance are guaranteed, by law, to all society.<sup>4</sup> Such treatment consists of a surgery in which a healthy kidney is transplanted, living donor or corpse, to a recipient. It is essential that the donor be compatible with the recipient, reducing the risk of organ rejection.<sup>2</sup> Still, the success of the transplant has been influenced by the evolution of the immunosuppressive medication, which is fundamental for the maintenance of the transplanted organ.<sup>5</sup>

The use of immunosuppressants is a pharmacological method in which drugs that block autoimmune reactions of the organism to the new organ are administered.<sup>2</sup> In this context, it is essential that the person carries out immunosuppressive therapy constantly after renal transplantation since, with the blockade of the immune system to the transplanted organ, its rejection will be avoided. In addition, its use leads to a sense of quality of life, protection, autonomy and, why not, freedom, especially when the transplanted person correlates this practice with the risk that exists in relation to the rejection of the transplanted kidney.<sup>6</sup>

For immunosuppressive therapy to be effective, some care is required, such as following the recommended doses and schedules; do not interrupt the use of the medicine; comply with the guidelines; verify the validity date of the medication, and keep it in an appropriate place; pay attention to the side effects; and if in doubt if you took the medicine or not, wait for the next hour. For the maintenance of the transplanted organ, it is important not only the use of immunosuppressants, but also healthy eating, reduction of salt consumption, sugar substitution by sweetener and intake of filtered water, care that will help maintain weight control.<sup>7</sup>

Although there are benefits related to the treatment and care to be adopted, it should be pointed out that the transplantation process can only be considered as a choice treatment if people with CRF are able to undergo surgery and do not have contraindications to the use of immunosuppressive medications. In this sense, it is important to point out that this modality of substitutive therapy provides a better quality of life when the person is well oriented about its procedure, since it presents the constant need for the use of immunosuppressive medications as a disadvantage.<sup>8</sup> Based on these arguments, this study aimed to analyze the use of immunosuppressants by people with renal transplantation.

### METHOD

This is a clipping of a qualitative-descriptive study conducted with 20 people of both sexes from May to July 2013. Participants met the inclusion criteria: 18 years of age or older; be willing to participate in the study; agree to the recording of the interview; accept dissemination of data in scientific circles; being with the mental faculties preserved; do not present difficulties of verbal communication; be linked to the nephrology service; have at least one year of renal transplantation; and have undergone some previous dialysis treatment.

Contact with the participants occurred by telephone, through a list of people who have undergone kidney transplantation, provided by three nephrology services of a municipality in the southern region of the State of Rio Grande do Sul. After being accepted to participate in the study, the time and place of the interviews were scheduled, performed at home and in other specific places according to the participants' request. Before starting the interview, the Term of Free and Informed Consent was presented, with the objectives of the research, the guarantee of anonymity, free access to data and results and the freedom to withdraw at any time, signed in two ways, one remaining with the participant and the other with the researcher. Data collection was done through a semi-structured interview, which, after being recorded, was transcribed in full and submitted to thematic analysis for this clipping, following the steps: pre-analysis, material exploration, treatment of results obtained and interpretation.<sup>9</sup>

To develop the study, the Resolution of the National Health Council of the Ministry of Health, which deals with the guidelines and norms for research involving human beings, and the ethical principles of the Code of Ethics of Nursing Professionals were respected. The study was approved by the Research Ethics Committee under n° 192/2013. In order to guarantee the anonymity of the participants, they were identified by the letter E, followed by an Arabic number, according to the sequence of interviews, plus age (example: E1, 43 years old).

## **RESULTS AND DISCUSSION**

In this chapter, the characterization of study participants will be explained first. Ten were men and ten, women. Age ranged from 30 to 66 years. Most considered themselves of the white race, catholic religion, married civil status, incomplete elementary school and retired.

From the analysis of the interviews, three categories were identified: routine use of immunosuppressive medications; presence of side effects of immunosuppressive medications; and dispensing of immunosuppressive medications. These topics will be presented and discussed below.

# Routine use of immunosuppressive medications

Before getting to know the routine use of immunosuppressive medications, people were first asked about kidney transplantation, what was their purpose. One interviewee compared it to the role of a soldier.

What does the immunosuppressant do? [...] There is a war, and your soldiers go there and fight against the enemy. Same thing, you have some soldiers and you have some foreign body in your body, the defenses of your body go there and fight that strange body. And in this case, the kidney I received is a foreign body, so in order to prevent my defenses from reaching my kidney, I take the immunosuppressants, which leaves me defenseless . That's why I have to be very careful [...], for example, to not catch an illness, a flu or something. I'm prone to take, because I have no defense. So you have to take care of yourself like that. (E15, 39)

Based on the understanding presented on the performance of the immunosuppressive drug, the interviewees were asked how people organize themselves for the administration of immunosuppressive medications. They stated that, to ensure the functioning of the transplanted organ, there is a routine to be fulfilled.

It is a routine [the use of medications]. It's the same as doing any other treatment, you have to take the medicine on time. When the time has come, you have to drink. [...] So the medicine is as follows, I always have to be on time. In the morning, I take it at eight o'clock in the morning, I have medicine to take. (E12, 45)

When discussing that the use of medication is part of the daily routine, following schedules, one interviewee compared the immunosuppressants with hemodialysis. This comparison is related to the previous treatment routine.

It is routine as was the hemodialysis routine. I had to go for the dialysis, otherwise, I would die intoxicated if I did not dialysate, if I did not filter my blood and with the medicine is the same, it's the routine. (E3, 40)

Also, the way people organize themselves reflects at meal times, as they need to be careful during medication administration, which implies an organizational strategy. These findings are presented in the following reports.

Seven hours, you have to drink coffee, because at nine o'clock you have to take medicine [...]. After nine hours until half past ten you cannot eat anything, you have to stay fast. At eight o'clock it's medication, one hour after the coffee, then another hour after that medication, the other [medication]. I take the medication and at ten it is the last medicine I take in the day. (E4, 55)

It's something that has to be right, always, you cannot make any mistakes there, you cannot miss the right hours. Let's say, you can spend one more minute, one less, but you cannot miss it. You cannot go past the schedule like this, it has to be there and also the food at that time has to be. Let's say, I have breakfast in the morning at eight [hours], then I can only eat again after ten-thirty, eleven o'clock. You cannot mix food, nor a meal in there, because there is the ninth [hour] [...] I drink, it is one hour fast before and one hour fast after. [...] I may drink a little water, but I cannot eat anything. So, that is something that you have to know how to handle [...]. (E12, 45)

When they became aware of the care between the feeding and the medication they performed, the interviewees were asked if this interfered with their daily routines. Some did not agree with this situation, and they preferred to follow the drug treatment necessary after renal transplantation than to carry out hemodialysis. Others pointed to interference during meals.

It does not disturb anything, because you have to take the medicine. It is easier to take the medicine than to undergo hemodialysis (E4, 55).

I take medicine from eight in the morning, at nine and ten. [...] Look, it gets in the way sometimes [...], especially at night, because it's dinner time. You have to be half fast at these times from eight to ten [...]. They never explained why, but [...] I always hear someone say that sometimes [...] food messes up the medicine. Something can interact with the remedy and you have trouble, according to the doctor once told me that. So, ideally, you should fast and always take the medication with water. (E16, 40)

It does not disturb me, no. At least I take this medicine, but I know it helps me a lot in my treatment, so thank God, it does not bother me. (E19, 52)

Regarding the routine carried out for the administration of immunosuppressive drugs, one of the interviewees stated that they received guidance about the follow-up to be performed, but stressed that they never explained its importance.

This is a guide from the transplant. [...] For me, they never explained to me. They just taught me to take it like that [...]. But there are many colleagues like that, which you go there in the hospital, you always talk, each one has a story to tell, these things. There are people who change schedules, there are others who do not do this fasting that I do. But medical advice is to do, so I do. (E9, 55)

Although they have argued that the drug is part of the daily routine, they are often subject to forgetting their use. Possibility expressed by the interviewee E8.

At night, yes, sometimes when I'm making dinner, I'll take it ten hours, but I'll take it because it says in the little book there, even though you forget it, but I do not stop taking it. But most of the time, I take it at the right time. (E8, 50)

Another finding that emerged during the interview analysis was the time length that people with kidney transplantation will use immunosuppressive medication. Most have addressed that use is necessary for the rest of life.

*For the rest of your life [take medicine]. There is no escape. (E4, 55)* 

*This medication that I take, it has to be taken forever, for the rest of my life. (E12, 45)* 

I want to take this medicine that I take all my life and will never go back to what I did [hemodialysis]. [...] That's why I tell you, we value things much more. After I've already taken, I think almost 40 pills in one day, I'm taking these, I do not know, ten, twelve, for me it's nothing and if I have to take it, I'll take it for the rest of my life. (E16, 40)

With regard to quantity, as E16 stated that he/she used almost 40 types of medicines, respondents were questioned about this occurrence. I've taken a lot more, but this is only at the beginning, then the time pass and they decrease, but now it's been three and a half years since I'm in that dosage. I believe they will not stir anymore, that will continue in this [dosage]. (E3, 40)

So, now even the doctor took one out [medicine]. I take four pills a day, now I'm taking two and a half a day and one at night to see if it shrinks, because twice a week I can tell you that I have a bowel problem. [...] Of course, with the time you decrease the amount of medicine and the body itself gets accustomed, is getting used to it. [...] These are very strong medicines, so you are going to take some things, other health problems will appear, and so on. (E11, 54)

At first there were many, but not now, it is just one. I think it's to prevent problems, to not reject the kidney. At first it was two in the morning at nine, and two at ten in the morning and at night as well. Not now, now it is only one. At the time the examinations are good, the doctor decreases. (E17, 40)

*I use too many medications.* [...]*I even have everything here, everything pointed here, the medicine I use in the case, which I am using now.* [...] *It used to be more medications, then it was decreasing.* (E19, 52)

Although the interviewees addressed the amount of immunosuppressive medication used, concentrating more in the beginning of the renal transplant, E11 emphasized the intense action these medications had and could lead to the appearance of other health problems. This fact related to the conviviality with the side effects.

## Presence of the side effects of immunosuppressive medications

Also in the testimony of E11, when commenting on the amount of medications used, refers to the appearance of possible side effects, other interviewees also mentioned the conviviality with this situation, in which it often becomes a nuisance in their lives.

[...] taking away that oiliness that I have on my skin, so much pimple,[...] that one of the remedies I take is pure oil inside and there is another remedy that I take, I take two to rejection. Yes, there are a lot of people who take and have diarrhea, and in me it never caused that. So it is more like this oiliness that I have on my skin and it is a very strong medication because it is to maintain an organ that is not yours. (E3, 40)

[...] for me it gave me colic, horrible diarrhea (E7, 58).

Weight gain. Not so, not malaise, but they increase the weight, creates cheek and also this right here [fat accumulated in the chin]. And the belly, the belly is very big. [...] I increased 15 pounds and I am very hungry. These medicines make you hungry, but the doctor said that it is normal to increase the weight and to get hungry. I do not know if it's normal. (E10, 46) Even presenting the side effects generated by immunosuppressive medications, some even mentioned the names of those who use them and who are responsible for such disorders. But to present in the results of this study, it was concealed so as not to prejudice the treatment of other people, with the possibility of drug interruption, without the assistance of a health professional.

The [name of the drug] makes people swollen a little bit too and helps them gain weight. [...] In my case, hair loss, I did not have this hair loss thing. Vision, I had to seek an oculist [...]. I lost my sight. (E8, 50)

For me, I got fat. [...] People swell a lot, depending on the dosage, that the [drug name] is a corticoid, I use only five milligrams, so it's weak for me. But even so, during the day I feel like it swells my legs, the face did not swell. (E9, 55)

[...] the [name of the medicine], depending on, there are occasions that cause me a diarrhea. The [name of the medicine] in the beginning created me much by and [...] a lot of problem on the skin, it gives affections in the skin and such [...]. Diabetes did not, it appeared after I started using this drug. [...] Triglyceride, cholesterol, this all came out after I started using immunosuppressants. (E11, 54)

I know a lot of people that suffered several side effects. The [name of the drug], that same, I've even seen people with schizophrenia [...]. The [name of the drug], it is very strong. [...] He reads his package insert, you do not even take that medicine, he's very strong. I've seen people lose memory. [...] It has several side effects. Except for me, the only side effect I had from the [drug name] was that at first I was constantly forgetting things, a hideous oblivion [...]. (E16, 40)

Afterwards, I think that during a month or two, it gave me pain in my legs because of the medicine. The doctor said that it is very difficult to give this problem to patients, but sometimes happens [...]. I do not know which one was, if it was the one [name of the drug]. I do not remember anymore. [...] I know that the body does not accept the medicine well, that until those times I was there and she asked me how long I had been with leg pain, because there was another patient who had this problem too , [...] that the person could not walk. I was, I think, six months like this, with this problem in the legs. (E19, 52)

One interviewee noted that the presence of the side effect of medication can be avoided with some care. Among them is sun exposure and consumption of dairy foods.

You have to be careful with the sun so you do not get these spots [...], that's the medication [...]. As I told you, I had these problems last year because of the medication. The medication with the milk was causing a problem, so I had to be hospitalized several times with hemorrhagic diarrhea. The doctor prohibited milk, all the milk derivatives [...]. I had coffee with milk, I did not take it with the milk, the medication I took with water. But the milk was hurting me and the doctor prohibited the consumption of milk and I ended up improving. Everything improved and the medication was cut in half. [...] What caused these problems was this, the medication along with the milk. That was the problem. (E18, 55)

One of the side effects presented was the change in visual appearance, reported by a respondent who expressed discomfort.

[...] the average of my weight was around 70 kilos, I was always skinny. I was always thin and tall, and after the surgery, a year later I had 95 kilos and until today I could not lower it to 90 or less. [...] I think so, I never imagined being fat, and today I'm fat. It is not just fat[...]. A tummy that is a problem. So that's one thing I never imagined, because I was thin. I never imagined that, so it gets in the way a bit. The issue of hair also bothered me at a time. [...] To this day I've always been a bit thick like that, my family always was, but some time ago I was even more, had legs swollen, was a little red at the time. Today, as the body has become more accustomed, I do not notice that much, but [...] in the first years, in the first years of surgery is complicated, that makes people even a little at home. (E11, 54)

By stating that the consequences of the side effects of immunosuppressive medications leave people more withdrawn, to the point of staying in their homes, the respondent E11 still addressed the issue of self-esteem. This is a reason that should be worked out by the health services.

[...] this question and that many do not work, that clinics, hospitals do not work, is the person's self-esteem. I think this is something that has to be much worked out for the staff on hemodialysis, the people that is transplanted [...]. The transplanted, these swellings he has from the immunosuppressants, these hairs [...], because you take very strong dosages at first, then it leaves you looking like you are an alcoholic, so [...] then a person enters depression [...]. So, self-esteem is complicated. (E11, 54)

Although the side effects of immunosuppressive medications occur, it was not all the interviewees who stated the coexistence with such adverse factors.

Not until now. (E13, 53)

*I do not feel anything [side effects of medications]. For me, everything is normal. (E14, 41)* 

Furthermore, E18, despite having previously demonstrated coexistence with one of the side effects caused by immunosuppressive drugs, demonstrated knowledge of the possible consequences of reading the package insert.

All medication has side effects. And those are related to the transplant medication, if you read the package insert, you will not want to take it. [...] So, even the State, when the medication is released, [...] we sign a compromise that the doctor has already told us about the side effects of that medication, that the patient knows about. So, it causes, especially the [name of the drug], it causes, so it says there in the package insert, even cancer. But we have to take it. (E18, 55)

As this statement presented, the information received about the side effects of immunosuppressive medications was reported by the interviewees.

[...] Until recently, we had to take a paper to reevaluation that they gave to us back in the pharmacy, explaining all possible side effects of these rejection drugs. So there's a lot that can happen. (E3, 40)

At first when I did, I was like, "Ah, new life!". Then as you go to the appointments, which is twice a week when I started, they will explain that if you take too much medicine, even one more ,gives you diarrhea. (E8, 50)

In addition, one of the care that people are alerted to the treatment of renal transplantation is the non-accomplishment of self-medication. This fact is justified by the possibility of drug interaction, that is, of a drug interfering with the effect of immunosuppressive medication.

No, transplanted takes no prescription from anyone because he cannot take any kind of medication. [...] We can only take [name of painkiller medication] if one has a headache [...]. (E4, 55)

Based on this situation, there was a report of the need for better assistance to the transplanted person, in order to obtain more guidance and clarification of the doubts about the care to be followed.

So I do not know, I think we needed some assistance. I do not know what others will think, what others will say, but I particularly, I miss having at least minimal assistance, that is, to ask questions. Even, look, sometimes just to come in and ask for a remedy. If I have a cold, what can I take? Or because you are very restricted to any medication. You cannot take anything without talking to the doctor. [...] In this case, my nephrologist is only private, so I have to pay an appointment for her to know what medicine can I take and will she be able to help me? There's all that. (E13, 53)

In this testimony, the respondent E13 emphasizes the restriction of the use of any medication other than the immunosuppressive prescribed by the professionals responsible for the maintenance of the transplanted renal organ. And even requesting information from the nephrologist, the physician may be restricted in providing information, since the care to avoid drug interaction is fundamental.

# Dispensing of immunosuppressive medications

The way in which immunosuppressive medication is dispensed to people with renal transplantation was explained by the interviewees, claiming the responsibility to the public power.

[...]the government that provides immunosuppressants. (E9, 55)

*These* [*medications*] *here of rejection, I get from the state. Now the rest, I buy. Those of lower price, these things that are within my reach, I buy everything.* (E20, 63)

*But it is so, these here [immunosuppressive drugs] are in the State Pharmacy, this one can never be lacking. (E13, 53)* 

When mentioning the question of buying other lower-cost but non-immunosuppressive medications and stating that they are received by the public authorities, respondents were asked what the cost of the immunosuppressive drug was.

They have said that it was very expensive, I do not know if costed seven hundred [reais]. I do not know if it is true, that they have said that this medicine was expensive. I do not know, because I also never asked the price so, but they have said it was expensive, and if that was the case, I would not be able to buy it because it is almost my salary. (E19, 52)

These days in [name of city where I was], I asked at a pharmacy, they did not have the information cost, nor in the list: "We do not have it here, lady, not even in the list. We have no idea." But I say that it [immunosuppressive medicine] is very expensive. (E20, 63)

According to the E13 speech, stating that immunosuppressive medications can never be lacking, the interviewees were approached about the possibility of this situation materializing. Some have claimed that there have never been, others have already stated the occurrence.

Mine never lacked. That's the only way my papers have to be always up to date. Every six months you have to do an evaluation [medical evaluation] to see if it is the same dose. If the doctor has decreased, you have to put it there in the Secretariat [Secretariat of Health] [...]. Without the papers, I do not take an extra medicine that is not mine. [...] If it is lacking, it is not their fault [Secretary of Health]. (E8, 50)

*There is usually no lack of medication.* [...] *Very difficult to lack medicine, at least from transplantation* [...]*.* (*E*16, 40)

*Always have. Everytime I go there [the place where you do the distribution], you always have the medicine. (E10, 46)* 

[...] there have never been a lack of medicine. The first time. [...] They have nothing for them, because it is not them who need it. [...] I think that for them [...], they will not even bother with it. For me, it's going to be difficult to have to go through it all again [go back to the hemodialysis] [...]. I did not understand why the medicine was missing. They say it was because the doctor increased the amount of medicine and did not give me the prescription or I did not remember to ask [...]. (E19, 52)

E19 reports the possibility of an error found in the prescription of the medication prescribed by the medical professional and his absence for the withdrawal of the immunosuppressive drug at the place of distribution. In this context, respondents said that, in order to ensure the receipt of medical treatment by the public authorities, people with kidney transplantation need to have the medical evaluation papers updated, according to a respondent's report.

If it is missing for me, only if I didn't put the evaluation papers every six months there [Pharmacy responsible for the dispensing of the medication], one must understand, that there they do not deliver the medicine without the papers, to see if the medication is the same or has increased. (E8, 50)

With the possibility of not providing immunosuppressive medication by the public power, there is a non-governmental organization that assists people with kidney transplantation.

We here [in the Association], if we close the doors, what happens? There are people who [...] depend directly from here, that the government is very flawed in the issue of drug distribution. Our medication is always having flaws, faults, delays, and in the case of the transplanted one, if it passes 24 hours without the use of the medication, [...] the immune system of each, depending on the person, can start a rejection and rejection, when begins, is complicated. (E11, 54)

Also, people who experience non-delivery of immunosuppressive medication seek strategies that they can achieve with other people to avoid non-use.

Until I went to see if I could, until yesterday I went to another colleague who has undergone hemodialysis, she is still on hemodialysis, [...] she goes three times a week. I was even going to talk to her, I'll still talk to her to see if she could get there, talking to the nursing staff, [...] to see if she could get up to two or three cards until next month. (E19, 52)

In view of the testimony presented by the interviewee E19, we note the concern experienced with the absence of immunosuppressive medication and the intention to ask people, who believe that they can help. Such a situation may reflect on the fear of rejection of the renal organ, thereby affecting one's psychic health.

One of the first highlights presented in the results of this study was the understanding of the transplanted person about the purpose of the immunosuppressive medication that needs to be used. Thus, it is emphasized that the immune system recognizes, defends and protects the body against infections and rejects what is strange. When transplant surgery is performed, the transplanted organ is not recognized by the immune system, since it does not belong to the recipient's organism.<sup>10</sup> Immunosuppressive treatment is necessary to prevent rejection of a transplanted organ.<sup>11</sup> The medications considered immunosuppressive, such as corticosteroids, tacrolimus, cyclophosphamide, cyclosporine, among others, have the purpose of suppressing the immune response of the organism and reducing the activation or efficacy of the immune system.<sup>12</sup> Thus, the chances of rejection of the transplanted organ are reduced.

As renal transplantation is one of the treatments for CRF, as well as hemodialysis and peritoneal dialysis, it is important to follow the schedules correctly and the use of immunosuppressive medication must be continuous. This fact was observed in the first category of the results. In this context, the practices are permeated by strategies, in which renal transplant patients seek to optimize the use of medications, to face forgetfulness, discomfort or disorganization, without following the dosage prescribed by the health professional.<sup>6</sup> Necessary care that will be followed while the transplanted kidney is performing its physiological functions properly.

When discussing that medications can only be prescribed by the health professional, this statement is mainly related to the responsibility of the physician, since this fact is associated with important adverse effects, known by the physician .<sup>12</sup> Still for the prescription of drug therapy, some procedures should be followed, such as anamnesis (considering the age, the drugs in use and the comorbidities that exist), the routine of examinations (because it will determine the clinic, the most indicated medicine and its respective dose), the detailed knowledge about its indications, drug interactions, and side effects. Therefore, one can offer better quality of life with lower risks, <sup>11</sup> especially those related to kidney rejection.

In order for the person to receive and use the medication rationally, minimizing the risks, one must understand the prescription, its objectives and the way of use. Thus, it is necessary that a communication takes place between the doctor and the person, so that both exchange information, from clarification of doubts until certification by the professional that the person understood the proposed therapeutic treatment. Failure to understand medical prescription can contribute significantly to non-adherence to the treatment, or even to health status worsening, especially when dispensing mistakes occurs or exchanging medications.<sup>13</sup> In addition, nursing can contribute via guidelines, in order to stimulate the compliance with the immunosuppressive therapy.

According to what was pointed out in this study, there is a need for care with self-medication by transplanted persons, so as not to interfere with the action of immunosuppressive medications. Thus, the practice of self-medication can lead to harmful consequences regardless of the disease, symptom or medication used.<sup>14</sup> In addition, the purchase of medicines without a prescription can cause damage to the health of the transplanted person due to pharmacological toxicity that may exist, thus impairing the functioning of the renal organ. This situation could lead to the failure of the transplanted kidney, and consequently, the return to hemodialysis or peritoneal dialysis.

Although a certain care routine occurs, the use of the immunosuppressant drug is preferential for the person with CRF, being better than dialyzing, as observed in this study. This finding corroborates with data found in a research that detected that people with CRF on hemodialysis have the knowledge that noncompliance with immunosuppressive medication can cause serious complications to health, risk of graft loss, and death. In addition, the participants reported the need to use, on a continuous basis, an expressive number of medications after the transplant, demonstrating a certain difficulty in the adherence to drugs in the long term. These reasons led to the lack of interest in joining a waiting list.<sup>15</sup>

Despite the finding of the aforementioned study, it has generally been discussed in the literature that the medication is correlated with quality of life after transplantation, because as it replaces the graft dialysis machine, which guarantees prolonged renal functioning, there is possibility of greater autonomy in the accomplishment of social and labor activities. Therefore, adverse reactions to the drug become bearable in the face of the risk of resuming dialysis.<sup>6</sup> And regarding the presence of side effects presented by the interviewees of this study, it is emphasized that immunosuppressants are responsible for several undesirable results that may affect health evolution.<sup>16</sup>

In renal transplantation, there is evidence that adherence in the post-renal transplantation period is more significant when there is no adverse event from immunosuppressive medications, coupled with adequate professional follow-up with guidelines on how to proceed in each situation experienced by the patient.<sup>17</sup> As the lack of adherence to established therapy is a complex and multidimensional problem, transplant teams should routinely review and improve their multidisciplinary approach to transplanted individuals. Thus, further studies are needed to better understand how personal traits affect adherence to treatment.<sup>18</sup>

Another aspect presented in this study was the dispensation of immunosuppressive medications for people with transplantation, a situation that is one of the attributions of the Brazilian public power, the free distribution. In this sense, it should be pointed out that in Brazil, unlike other countries, access to immunosuppressive drugs is guaranteed by the Unified Health System.<sup>6</sup> So much is that the Ordinance SAS / Ministry of Health No. 1,018 / 2002 approves the clinical protocols and therapeutic guidelines for the immunosuppressive drugs used after renal transplantation. This protocol needs to be followed by physicians and other health professionals who performs follow-ups on transplanted patients.<sup>8</sup>

Although there is a free supply and a protocol that guides the professional behaviors for the care to the person with renal transplantation, it was observed in this study, reports that show the risk of living with the lack of

immunosuppressive medication, its non-use leading to the risk of rejection of the immune system to the transplanted organ. To avoid the lack of medication, some interviewees reported the need to contact institutions or people to assist in the purchase of the drug, so that they can continue the treatment. In view of this aspect, one study addressed that people with renal transplantation clearly expressed the need for medication. In this context, there are strategies to guarantee access to the medication and to avoid its shortage with the possible risks that this can bring. They seek to escape the lack of the drug and communicate with health professionals (nurse, doctor) or a person who is also transplanted and who uses the same medication, asking for help, or even strive to get the medication in other states that provides the required amount of medicine. This singular finding, which has not been reported in other studies, seems to reflect the mismatch in the organization of care at the local level, thus triggering coping strategies for the maintenance of their lives and the autonomy obtained by the transplantation.6

## CONCLUSION

This study analyzed the use of immunosuppressive drugs by people with renal transplantation, which explained different perspectives on the subject. In addition to analyzing the use of drug treatment, it was possible to verify subjective opinions about this experience, highlighting the idealizations of the rupture with CRF and the dependence of renal replacement therapy, such as hemodialysis, being considered, by some participants, the release of the Dialyzer machine.

However, over time, people realize that the process of illness still permeates their lives, from dependence. At that time, with the use of essential drugs to avoid rejection of the transplanted organ, being associated with hemodialysis itself, as a consequence of the exhausting routine.

The adversities that occurred as a result of the use of these medications were emphasized, such as frequent and necessary fasting intervals, side effects among physical and psychic symptoms and comorbidities. However, for some people, the benefits outweigh the harm, especially the disruption with hemodialysis. It became clear that these people needed strategies to minimize the pitfalls they faced. In the meantime, they emphasize that the health system needs assistance for the control and orientation of the use of medications, as well as to meet other needs, such as pathologies that arise during life, since they are not immune to other illness.

This study is extremely relevant, since it presents singularities of the experience of people dependent on a continuous drug treatment, therefore, provides theoretical subsidies that may qualify the attention practices directed to those who experience the dependence of these drugs. It is suggested the development of other studies that broaden the view on this subject, especially the interventional ones, so that they elaborate in the assistance practice strategies that overcome the fragilities identified.

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