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SOCIODEMOGRAPHIC AND CLINICAL FACTORS AND IMPACTS ON SEXUALITY OF KIDNEY TRANSPLANT PATIENTS: AN OBSERVATIONAL STUDY

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RELATO DE CASOS

ABSTRACT

This study explored the association between sociodemographic and clinical factors with the sexuality of kidney transplant recipients treated at the Federal University of Maranhão Hospital. A cross-sectional, quantitative approach was employed, involving 80 patients over 18 years old, of both genders. Data were gathered through questionnaires assessing sociodemographic, clinical, and sexual function variables, utilizing the Male and Female Sexual Quotient instruments. The findings revealed a predominance of women, with an average age of 47 years. Key factors such as age, gender, and duration since transplantation were significantly associated with sexual dysfunction. The research underscores the relevance of evaluating sexual function in the routine care of transplant patients, given its profound impact on their quality of life and overall well-being. The study advocates for the integration of multidisciplinary approaches to enhance patient care, emphasizing the necessity of addressing sexual health as a pivotal component of comprehensive treatment strategies. These findings contribute to a growing body of evidence supporting the importance of holistic healthcare models tailored to the unique needs of kidney transplant recipients.

Keywords: Kidney Transplant. Chronic Kidney Disease. Sexual Function. Sociodemographic Factors.

FATORES SOCIODEMOGRÁFICOS E CLÍNICOS E IMPACTOS NA SEXUALIDADE DE PACIENTES TRANSPLANTES RENAIS: UM ESTUDO OBSERVACIONAL

RESUMO

Este estudo explorou a associação entre fatores sociodemográficos e clínicos com a sexualidade de receptores de transplante renal tratados no Hospital da Universidade Federal do Maranhão. Foi empregada uma abordagem quantitativa transversal, envolvendo 80 pacientes maiores de 18 anos, de ambos os sexos. Os dados foram coletados por meio de questionários avaliando variáveis sociodemográficas, clínicas e de função sexual, utilizando os instrumentos Quociente Sexual Masculino e Feminino. Os achados revelaram predominância de mulheres, com média de idade de 47 anos. Fatores-chave como idade, sexo e duração do transplante foram significativamente associados à disfunção sexual. A pesquisa ressalta a relevância da avaliação da função sexual no atendimento de rotina de pacientes transplantados, dado seu profundo impacto em sua qualidade de vida e bem-estar geral. O estudo defende a integração de abordagens multidisciplinares para aprimorar o atendimento ao paciente, enfatizando a necessidade de abordar a saúde sexual como um componente essencial de estratégias abrangentes de tratamento. Esses achados contribuem para um crescente corpo de evidências que apoiam a importância de modelos holísticos de assistência médica adaptados às necessidades únicas dos receptores de transplante renal.

Palavras-chave: Transplante Renal. Doença Renal Crônica. Função Sexual. Fatores Sociodemográficos.

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INTRODUCTION

Chronic Kidney Disease (CKD) is recognized as a significant global public health issue, with its prevalence increasing substantially due to population aging and the rising incidence of chronic illnesses (Kim et al., 2019). This growing prevalence poses challenges for public health systems worldwide, emphasizing the need for strategies to prevent and slow CKD progression to mitigate its social and economic impacts (Sousa et al., 2017).

CKD is characterized by a reduction in kidney function lasting three months or more, with associated health implications regardless of clinical diagnosis. It is typically identified through criteria such as albuminuria or reduced glomerular filtration rate (GFR) below 60 mL/min (de Oliveira et al., 2019; KDIGO, 2013). According to KDIGO (2013), CKD classification is based on the underlying cause, GFR category, and albuminuria level, which help to assess the risks of adverse outcomes, including renal impairment and mortality. Establishing the CKD cause is crucial for tailoring treatment and mitigating risks.

CKD is stratified into five stages based on GFR and albuminuria. Patients with a GFR below 15 mL/min/1.73 m^2 enter the end-stage renal disease phase, requiring Renal Replacement Therapy (RRT). Available RRT modalities include continuous ambulatory peritoneal dialysis (CAPD), intermittent peritoneal dialysis (IPD), automated peritoneal dialysis (APD), hemodialysis (HD), and kidney transplantation (KDIGO, 2013; Zanesco et al., 2017). Kidney transplantation is often regarded as the optimal treatment for end-stage CKD, offering improved survival rates, enhanced quality of life, and long-term cost savings compared to other RRT methods (Alnasrallah et al., 2019; Gonçalves, Loureiro & Fernandes, 2019).

CKD diagnosis and management demand substantial readjustments in various aspects of a patient's life, encompassing physical, psychological, and social dimensions. These changes often affect the patient's overall well-being, family relationships, work dynamics, and personal interactions, leading to significant lifestyle adaptations (Ramírez-Perdomo & Solano-Ruíz, 2018). Among the numerous challenges faced by kidney transplant recipients, sexual dysfunction is a prevalent issue with profound implications for quality of life, self-esteem, and interpersonal relationships (Mendes & Almeida, 2013).

Sexual dysfunction in transplant patients is often linked to the psychosocial and physical adjustments required post-transplantation. The incorporation of a new organ may lead to psychological challenges, including negative impacts on body image and sexual response (Mendes & Almeida, 2013). Despite the overall health improvements associated with kidney transplantation, sexual dysfunction remains a persistent concern in this population. It is vital to address patients’ expectations regarding sexual function and provide comprehensive support to manage this aspect of their health effectively (Ramírez-Perdomo & Solano-Ruíz, 2018).

Given the significant impact of sexual dysfunction on the lives of kidney transplant patients, it is essential to evaluate its prevalence and the sociodemographic and clinical variables associated with it. This study investigates the relationship between these factors and sexual function among kidney transplant recipients at the University Hospital of the Federal University of Maranhão (HUUFMA). By doing so, this research seeks to contribute to a broader understanding of the challenges faced by this population and emphasize the importance of multidisciplinary approaches in their care.

METHODOLOGY

This study employed a qualitative, descriptive, and exploratory field research design. The qualitative approach was selected due to its widespread acceptance and application in health research. As noted by Minayo (2012), the principal feature of qualitative research lies in the verb "understand," which enables the interpretation of data. This approach acknowledges the contextual uniqueness of each subject, considering their personal and collective histories.

The research was conducted in the Nephrology Department of a university hospital in northeastern Brazil, a regional referral center for chronic kidney disease patients and the only transplant-performing hospital in the state. The target population comprised kidney transplant recipients hospitalized in the renal transplant ward during the study period. Inclusion criteria included patients of both genders, aged 18 years or older, with a post-transplant survival of more than six months, proper graft function, and willingness to participate in the study. Exclusion criteria included patients with oral communication deficits or those under the influence of medications that altered consciousness during data collection.

PARTICIPANTS

The study included 10 participants selected through convenience sampling, adhering to the principle of saturation. Saturation is a practical conceptual tool used to determine the conclusion of data collection once redundancy or repetition emerges in the gathered information. It is commonly utilized in qualitative health research (Fontanella, Ricas & Turato, 2008).

This sample size was deemed satisfactory, as qualitative studies prioritize a deep understanding of the phenomenon over participant quantity. Identifiers such as "Participant 01" through "Participant 10" were used to ensure ethical compliance and maintain participant anonymity. Data collection occurred between December 2019 and February 2020, with participants' availability and consent determining their inclusion in the study.

INSTRUMENTS

Two main instruments were employed for data collection:

1. **Sociodemographic and Clinical Data Questionnaire:** A closed-ended questionnaire designed to characterize the study population.
2. **Semi-structured Interview:** This was based on the Wagnild and Young Resilience Scale (1993), which measures levels of positive psychosocial adaptation in response to significant life events. The scale items reflect widely accepted definitions of resilience (Perim et al., 2015).

PROCEDURE

Participants were recruited directly from the renal transplant ward individually to minimize external interference and ensure confidentiality and privacy. Following ethical research guidelines, interviews were audio-recorded and fully transcribed for subsequent categorization and analysis.

The collected data underwent qualitative treatment using Bardin's Content Analysis methodology. As outlined by Silva et al. (2014), Bardin's Content Analysis (2006) comprises three stages:

1. **Pre-analysis:** Preparing the collected material for operationalization and initial idea systematization.
2. **Material exploration:** Coding and defining categories for analysis.
3. **Treatment of results, inference, and interpretation:** Synthesizing, highlighting, and analyzing findings, culminating in inferential interpretations—"a moment of intuition, reflective and critical analysis" (Bardin, 2006).

RESULTS AND DISCUSSION

The Kidney Transplant Unit at the studied hospital commenced operations in March 2000, performing its first transplant with a living donor. Since 2005, the unit has also conducted transplants using organs from deceased donors. Kidney transplant recipients are provided with comprehensive care, including outpatient follow-ups (both pre- and post-transplant) and hospital admissions to address various clinical complications that arise during treatment.

This study involved 10 participants during their hospitalization period, comprising 2 men and 8 women, aged between 30 and 66 years. Among them, 3 participants were single, while 7 were married. One participant was engaged in paid employment at the time of the interview, whereas the others relied on assistance or social security benefits due to their medical conditions.

Educational attainment among participants ranged from no formal education to the completion of higher education. In terms of spirituality or religiosity, 2 participants did not identify with any specific religion, 3 identified as Evangelicals, and 5 as Catholics.

The time since diagnosis varied from 4 years and 6 months to 22 years, while the duration since kidney transplantation ranged from 2.5 years to 15 years. Of these, 2 participants were recipients of organs from related living donors, and 8 received organs from deceased donors.

Data analysis revealed three primary themes: **"The relationship between illness, transplantation, and resilience," "Resilience factors in kidney transplant recipients,"** and **"Post-traumatic growth in kidney transplant recipients."** These themes served as the basis for organizing the findings and discussions. The results were interpreted through the lens of Positive Psychology, where resilience is a key construct, as well as the framework of Health and Hospital Psychology, which considers the chronic illness context and the clinical setting of this research.

This approach allowed for a comprehensive exploration of the psychosocial dimensions of resilience, emphasizing the interplay between individual experiences, environmental factors, and the therapeutic journey in the context of kidney transplantation

THE RELATIONSHIP BETWEEN ILLNESS, TRANSPLANTATION AND RESILIENCE

The unique experience of illness, the position taken by kidney transplant recipients, and the meanings of resilience in the midst of experiencing a kidney transplant are aspects of an event permeated by the discovery of the diagnosis, dialysis treatment, frustrations, waiting, losses and even new meanings attributed to existence itself. Thus, when seeking the subjective expression of the participants in this research, it became clear that Chronic Kidney Disease (CKD) imposes a series of changes in the way of living marked by different trajectories of coping with the same chronic condition.

According to Rudnick (2020), the person does not react objectively to the disease; they live with the disease, and this experience is marked by varied emotional reactions, as evidenced in the speech yes E09: *"This kidney disease came to show me that I'm not so superior, you know? Before, I was very proud and vain, I didn't stop to think about things in life, here we are forced to think better about how we live, this stops* *you, changes the way you react to things, how you deal with good and bad things , I think that with the transplant I changed for the better, but I had to experience the worst."*

While for E07, the DRC perspective brought: *"The worst thing that can happen to someone, here you are always stuck to something, stuck to the machine at the clinic, stuck to something in your belly, stuck to a bunch of medicine that holds you back and can hurt you (...) I will never be like my life before, and I will never accept that".*

The emotional impact of the disease and permanent treatment are broad and provide unique experiences; it is clear that each subject has their way of dealing with their illness, interpreting and reinterpreting situations, thus attributing meanings and meanings according to their life history and the circumstances he experiences (Almeida and Palmeira, 2018).

Studying resilience in this context means, in general, trying to answer the question: what makes some people feel better after experiencing adversity amid chronic illness and kidney transplantation and others not? Reflecting beyond an outcome after adversity, it is necessary to understand the coping paths in the face of adversity, revealing different possibilities for reacting to stressful events (Brandão and Nascimento, 2019).

According to Bonanno and Burton (2013), resilience corresponds to a stable trajectory of healthy functioning after a highly adverse event., more than a recovery process; that is, it is something dynamic and capable of generating positive experiences and emotions; this conception can be exemplified in E05's report: *"I tend to be a confident person, even when my world turned upside down with this disease and the beginning of the transplant, yes I went to rock bottom and I still do, sometimes I despair more, sometimes less, I think I always come back from stronger, I have a lot of stories to tell."*

It is understood that resilience is a process that admits variability, interacting with individual characteristics and the subject's exposure to adversity, culminating in an ability, at certain times and depending on the context, to deal with adversity by developing and maturing positively (Rudnicki, 2020).

The above conception shows that individuals do not maintain, in a linear course, the same capacity and way of coping with their difficulties, as was said by E10: *"We are never prepared for the worst. When I discovered this kidney problem I was down, nothing* *encouraged me, then when this transplant thing came up and everything went well with my sister, it was like a new chance, today I try to stay calm, when I'm admitted I try to face it without worrying. despair, there are many problems here, we need to become stronger to face them".*

An aspect that needs to be considered when it comes to resilience is the condition of adversity; we cannot talk about resilience without adversity; in this research, we consider the circumstances of chronic illness and the experience of transplantation as adverse. However, it is necessary to be careful with universal definitions of adversity, what is adverse for a given subject may be neutral for another who does not feel affected by the object in question, much of current research names adversities as stressors or events stressful (Brandão and Nascimento, 2019).

Therefore, an adverse event will only be considered a stressor and part of the resilience processes when it changes the subject's balance, demanding adaptation efforts. If someone is exposed to an event or a risk condition that does not alter their balance, we cannot discuss coping or resilience processes (Brandão and Nascimento, 2019).

It is from this perspective that the kidney transplant experience stands out, seen as a significant life event, requiring the facing of challenges to maintain treatment, which was elucidated by E01: *"I know, I know I'm prone, we who are transplanted are, we have this notion of low immunity, notion of limits, lots of medicines to take, at the same time we also can't stay there with that fear, with that fear of someone sneezing nearby and getting sick, that's why I've matured a lot, the problems will come, you can't suffer the day before".*

After kidney transplant surgery, subjects face new challenges, such as complying with a complex regimen of immunosuppressive therapy, being alert to the need to recognize signs and symptoms associated with imminent acute rejection and infection, and, most importantly, living the fear of an unfavorable prognosis and unknown survival time, which can generate distressing side effects, such aspects highlight the importance of paying attention to possible psychological suffering in kidney transplant recipients (Tian *et al*., 2016).

E10's report also refers to the transplant experience: *"The transplant is not freedom from the disease, right, so at the beginning I was amazed by so many things,* *but I already felt like a survivor, I was so happy for the donation, I don't know how long it will last, but I never failed in my care , I've gotten used to it, I really want to live it here."* The adoption of healthy behaviors in favor of adherence to treatment and the constant feeling of uncertainty surrounding the survival time of the kidney graft constitutes a need for broad adaptation, which can trigger physiological and psychological reactions that also permeate the assessment that the subject makes changes to circumstances to overcome, minimize or endure them (Fontoura, 2012).

There are several perceptions of efforts adopted and different evaluations surrounding kidney transplantation, such aspects are permeated by subjective and objective expectations of health recovery and continuation of life, this conception can be seen in E06's report: *"I didn't know that I had to take medicine here, or that one day the kidney would fail and I would need to go back to dialysis, I didn't know, I imagined it was something easier, like I'm going to have a transplant and everything will be fine, then later they They explained how it worked and I was almost in a panic, trying to see the good side, look, it's not as simple on this side as everyone imagines".*

The place occupied by kidney transplant recipients and how they appropriate this therapeutic modality and attribute meanings is not seen as much in the majority of available research, little is said about the subjective experience of living and making efforts to adapt to the transplant, speech of E01 expresses this conception in parts: *"Each transplant recipient has their own life, I have a transplant sister who doesn't live very well, she always ends up here and seems very sad, this is the first time I've been admitted in 5 years (...) for most of us it's a thousand times better than hemodialysis, now like this, it's like winning the lottery too."*

Studies that compared different types of renal replacement treatment and levels of anxiety and depression show that transplanted people have higher scores for physical functions. Despite presenting better results in terms of socio-affective aspects, they do not compare to the general population, which means that they experience new challenges that interfere with the re-establishment of quality of life, such as living with feelings of uncertainty (Brito, Machado, Reis, Carmo and Cherchiglia, 2019).

E06's speech elucidates some feelings: *"My body has changed a lot, I've gained a lot of weight, it seems that during the transplant I became more restricted and I care a lot about what people say, they think I'm not taking advantage of the chance, but that's* *not the case, my appearance bothers me, I have I'm much more afraid of living, it could be really stupid, but I feel all of this (...) I feel more sad, worried, and nervous, I don't like talking, I'm sorry, and it immediately makes me want to cry, it's a mix of fear of losing the kidney and having to face it all again, no It's like that every day, but most of the time, yes, it's difficult to understand, right, but it's also difficult to explain, I consider myself a strong person who lost strength, as if I carry a lot of scars today".*

Solid organ and stem cell transplant patients and their caregivers report a substantial level of existential distress (Stonnington, *et al.,* 2016). The fact that the graft has a limited functional life and the constant uncertainty regarding the future of the treatment can generate psychological suffering, as the loss of the graft means a return to dialysis treatment or death, we are facing a threatening experience (Tamura *et al.,* 2018).

In contrast, Brito's findings *et al*. (2018) show that people's feeling of hope after kidney transplantation was renewed. There was a personal transformation, expectations are created around life changes, transplant recipients start to believe and experience a feeling of well-being, with notable growth emotional stress associated with transplantation, as evidenced in E01's statement: *"The transplant is my new opportunity in life, if you think about it, even the lives of those who are healthy do not have ready answers, the fear of dying exists, now the chance of living well and a few more years is also real, I feel I feel very grateful."*

Transplantation is permeated by different meanings, the symbolism attributed to the transplanted organ, and how chronic illness is inscribed in the life history of these subjects. Thus, resilience was perceived as procedural and complex, marked by different coping trajectories and life possibilities arising from this treatment modality (Brandão and Gianordoli-Nascimento, 2011).

As stated by Brandão (2009), resilience is not innate or permanent but acquired, highlighting a universal potential for resilience that enables individuals to recover from adversities. When faced with threats or challenges, individuals must find ways to confront these situations, overcome obstacles, and emerge stronger.

The literature identifies various resilience factors that favor effective coping with adversity. While it is difficult to pinpoint universal factors leading to resilience, recurrent elements include an internal locus of control, social support, self-esteem, intelligence, low negative affect, high positive affect, self-regulation skills, self-efficacy, religious beliefs, meaning in life, attachment relationships, faith, and hope (Brandão, 2009).

This understanding aligns with the findings of this study. Resilience factors varied significantly among participants, influenced by personal characteristics, contexts, and specific adversities. For instance, E03 expressed optimism as a crucial factor: *"I'm always confident in what I'm going to do, I always trust in things. People say, 'you're too optimistic,' and I really am. I've already accomplished so much, and I think I can achieve more if I keep thinking like that."*

A combination of factors helps individuals navigate adversity. These mechanisms may not eliminate risks but promote adaptive responses. As E05 remarked: *"I am optimistic. I make a plan with confidence, first in God and then in myself. God has already done a lot for me, and I have never abandoned myself or stopped believing I can win the battles. My 15 years of transplantation are not for nothing, right?"*

The above statements illustrate self-efficacy, a belief in one's ability to achieve goals, often associated with resilience. Literature supports this connection, emphasizing that effective functioning requires both competence and belief in success (Fontes and Azzi, 2012).

Positive relationships, particularly within families, also emerged as protective resilience factors. E01 highlighted the significance of social support: *"When faced with problems, I always turn to my family—they are my support base. I think we became even closer after all these events. My husband is a great partner, my son too. Without them, I don't think I could bear it."* Social support acts as a buffer against stress, improving emotional well-being and life satisfaction (Müller et al., 2015). E03 added: *"My family helps me a lot—they don't despair, they give me strength, and they trust me more than I trust myself."*

Conversely, the absence of social support can lead to emotional distress. E04 noted: *"I like to resolve things alone. I think it's difficult for my family to understand what I'm going through. To avoid conflicts, I lock myself away. It's a difficult life for me. I feel* *like I carry a ghost that haunts me."* Research confirms that insufficient social support correlates with psychological distress, hindering resilience (Tian et al., 2016).

Spirituality emerged as another vital resilience factor, providing meaning and fostering coping mechanisms. Margaça and Rodrigues (2019) define spirituality as a human experience that brings purpose and connects individuals to something greater. Participants frequently cited faith as a source of strength. For example, E01 shared: *"Without God, it would be impossible to endure all this. I thank Him for my transplant and being alive."* E03 echoed this sentiment: *"I talk to God, and His help always comes. He never abandons you."*

Simão and Saldanha (2012) describe spirituality as a "bridge" during crises, facilitating adaptation and promoting resilience. The interplay of internal, relational, and contextual factors underscores the complexity of resilience. Grothberg (1999, as cited in Coelho, 2019) proposed a three-level framework: **I have** (social support), **I can** (skills for problem-solving and communication), and **I am** (optimistic, confident, and responsible), illustrating how resilience arises from dynamic interactions across these domains.

This study highlights that resilience is not a fixed trait but a multifaceted process influenced by internal beliefs, external support systems, and spiritual frameworks. Together, these elements enable individuals to confront adversity with strength and adaptability.

POST-TRAUMATIC GROWTH IN KIDNEY TRANSPLANT RECIPIENTS

A current idea with wide acceptance is that, in some way, positive emotions can affect our physical health or our ability to recover in the face of adversity, sometimes extreme situations such as a diagnosis or the suffering itself caused by an illness and treatment can produce beneficial effects on those who suffer, the concept of post-traumatic growth (PTC) reflects this idea and was identified throughout this study (Rudnicki, 2020).

The concept of CPT is described by the positive changes that are part of the process of fighting the stressful event, allowing the subject to deal effectively with it, generating positive changes in how they see the world, others and themselves. CPT is often confused with the concept of resilience, however, it is necessary to emphasize that the first focuses on transforming the person through improving psychic functioning, while the second indicates the ability to deal with negative emotions that arise from a stressful experience and function at normal or near normal capacity with a balanced stable (Greup *et al.,* 2018).

Growth occurs through attempts or efforts to adapt to situations with high levels of stress and not as a consequence of events alone, this phenomenon was noticed in E08's speech: *"I'm a person hardened by so much suffering (...) I don't know if it's a purpose to go through all this, but this illness and then this transplant are just another incentive for me to grow and show that I'm stronger than I imagined"* .

Knowing the life events perceived by subjects who have experienced trauma is fundamental to understanding the meanings attributed to the experience (Rudnicki, 2020). E02's verbalization stands out: *"Look, I've already lost a lot of important people in my life, this pain doesn't even compare to the punctures of dialysis, the fear of not living doesn't even compare to losing this good kidney, apart from death there is a solution for everything, I face the my life face to face, I may not be a studied person, but I know the strength I have and no illness will take that away from me".*

CPT only occurs if the subject perceives the event as sufficiently traumatic or disruptive; the perceived negative impact of the event has often been positively associated with growth (Coelho, 2019). In the field of psychology, the concept of trauma refers to the external stressful event that dominates the person emotionally and cognitively, disturbing the capacity for psychic functioning and communication (Torres Bernal and Mille, 2011).

Thus, this process develops as the individual seeks strategies to deal with emotions and negative consequences associated with the situation and begins to cognitively process the traumatic event, as observed in E09's statement: *"Every time I talk to one of you I learn something new, my way of thinking changes, sometimes we don't realize the strength we have, or we lose it a little, so we talk to you, to the other patients and it's like a click in the head, this disease has also brought me a lot of good things."*

CPT is, therefore, a positive cognitive remodeling resulting from experiencing a situation perceived as stressful and/or traumatic (Rudnicki, 2020). It is in the midst of this cognitive process of restoring central beliefs and attributing meanings to the experience that the subject begins to understand that the traumatic experience can bring benefits to different areas of their life, as E05 pointed out: *"I got my life back with this transplant, I got a piece of someone else, that's a big thing, one day I could lose it, you know, but I can get it again, and again, I'm a tough cookie. ".*

This perception is similar to that of patients who experience kidney transplantation as something that restored their lives. However, this is only possible if the subject stops seeing the transplantation as a form of denial of the disease and accepts it as a possible re-actualization of existential possibilities (Quintana, Weisheimer and Hermann, 2011).

The benefits perceived after a traumatic experience are directly associated with the search for meaning amid uncertainty and perception of vulnerability. In the context of transplantation, this implies going beyond understanding the disease, it is necessary to consider all facets of this subject, not restricting oneself or biological nor psychic (Coelho, 2019). In this context, resilience and CPT should be viewed as two independent constructs; however, there is evidence that both may function as protective factors that counteract adverse stress-related effects (Greup *et al.,* 2018).

In recent decades, Positive Psychology has focused on understanding positive outcomes when faced with adversity. Despite the possible adverse effects of such events, it cannot be denied that for some people, they can also serve as a framework for profound positive changes and psychological growth; it is noted that in the process of dealing with their losses, some subjects found a level of meaning in their lives that they did not have before.

FINAL CONSIDERATIONS

Exploring and discussing the concept of resilience within the unique experiences of individuals affected by Chronic Kidney Disease (CKD) post-transplantation introduces a novel perspective in scientific literature. Understanding the multifaceted meanings of resilience and the adaptive roles kidney transplant recipients assume enriches the comprehension of their experiences, perceptions, and expectations. This approach acknowledges the complexity and transformative possibilities inherent to transplantation.

This study highlighted a notable gap in national research addressing the affective-emotional aspects and general health perceptions of kidney transplant recipients. Examining psychological distress within this population and its representation of illness after transplantation is crucial. As Bonanno, Romero, and Klein (2015) emphasized, resilience has positively influenced health outcomes.

A seminal study in China by Tian et al. (2016) examined psychological distress and its association with resilience in kidney graft recipients. The study revealed that the inherently threatening nature of transplantation, coupled with uncertain health outcomes, often leads to psychological distress. Resilience emerged as a protective factor, with recipients demonstrating higher resilience levels experiencing lower psychological distress risks than those with lower resilience.

This work sought to deepen the understanding of resilience within the illness context, analyzing the subjective experiences of kidney transplant recipients. This study observed resilient behaviors from systemic, procedural, and contextual perspectives through the analyzed categories. These findings suggest that psychological resilience in this population can be conceptualized as a dynamic process. Through diverse trajectories, transplanted individuals, when exposed to adversity, exhibit adaptive adjustments that enable effective coping.

An often overlooked aspect that also warrants attention is the role of infrastructure in facilitating effective transplantation processes and patient resilience. The adequacy of hospital facilities, including dedicated transplant units, well-equipped intensive care units (ICUs), and outpatient clinics, plays a critical role in ensuring physical and emotional recovery. A robust infrastructure not only supports the medical needs of transplantation but also fosters a sense of security and trust among patients, enhancing their ability to adapt to the challenges associated with their condition.

The study of resilience, particularly its subjective dimension, holds significant scientific and therapeutic value. However, resilience should be viewed as a broad, multifaceted phenomenon, encompassing interconnected elements that cannot be fully understood in isolation. By employing a qualitative approach to explore the meaning of resilience in kidney transplantation and its impact on patients' lives, this research captured the complexity of individual experiences.

One of the study's limitations was its methodological approach, which outlined an overview rather than a longitudinal exploration of resilience across life trajectories. Future research should adopt trajectory-based methodologies to visualize coping mechanisms better, identify factors associated with different trajectories, and guide targeted interventions.

A resilience intervention incorporating mindfulness training for transplant patients and their caregivers, conducted by Stonnington et al. (2016) in the United States, demonstrated significant improvements in perceived stress, depression, anxiety, and health-related quality of life. These findings underscore the importance of addressing psychological resilience in transplantation and highlight the potential for integrative interventions within hospital psychology services. These services and well-structured hospital facilities play a crucial role in helping patients process and reframe their illness experience, fostering psychological well-being.

In conclusion, while kidney transplantation provides undeniable benefits, the preparatory stages, infrastructure adequacy, and subsequent adaptive adjustments represent deeply subjective and evolving processes. The experience of illness remains uniquely personal, shaped by many physical, emotional, and social factors. This study reaffirms the need to prioritize psychological resilience and ensure robust healthcare infrastructure as essential components of comprehensive care for kidney transplant recipients (GOMES et. al , 2024).

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