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## Research Article

# Psychological Changes in Post Kidney Transplant Recipients: Phenomenology Study

Aisya Rahmadhanty<sup>1\*</sup> | Yevri Zulfiqar<sup>2</sup> | Devia Putri Lenggogeni<sup>3</sup> |  
Meri Neherta<sup>3</sup> | Emil Huriani<sup>3</sup> | Fitri Mailani<sup>3</sup> | Susmiati Susmiati<sup>3</sup>

<sup>1</sup>Undergraduate Student, Faculty of Nursing Universitas Andalas, Padang, Indonesia

<sup>2</sup>Department of Surgery, Faculty of Medicine Universitas Andalas, Padang, Indonesia

<sup>3</sup>Faculty of Nursing Universitas Andalas, Padang, Indonesia

### \*contact

aisyarahmadhanty98@gmail.com

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### Abstract

**Aims:** Kidney transplantation can have a big impact on recipients, so they must be able to adapt to many changes, including psychological changes. Psychological changes are the most complained about by post- kidney transplant recipients. Psychological changes including feelings of anxiety and worry after kidney transplantation, these feelings arise due to post-transplant complications, feelings of guilt and fear of rejection, treatment regimens and uncertainty about the future. Therefore, recipients must be able to deal with psychological changes after kidney transplantation.

**Objective:** To explore the psychological changes of post-kidney transplant recipients.

**Methods:** A qualitative study using a phenomenological approach. This study was conducted on 6 participants who were undergone kidney transplantation. Puroasive sampling was performed and data was collected through 35 to 60 min. Data collection in this study was carried out through in-depth interviews, audio recording and field notes. The data analysis technique uses the Collaizi method (1978).

**Result:** This study obtained results including: psychological adaptation transitions and post-transplant anxiety control strategies.

**Conclusion:** Kidney transplant provide better psychological changes if the recipients can implement strategies to control emotions. Therefore, it is important to have family, social and nurses support in controlling the psychological changes of post-kidney transplant recipients.

### Keywords:

**Kidney transplant, psychological, recipient.**

## INTRODUCTION

ESRD is a rapidly increasing global health and healthcare burden in the world(1). Globally, the prevalence of ESRD at the end of 2014 increased by 3.37 million people, and is expected to continue to increase until 2030.(2,3). Meanwhile, the prevalence of ESRD in Indonesia has also increased from year to year, namely as many as 77,892 people in 2017 and increased to 132,142

people in 2018.(4). ESRD patients experience permanent kidney function impairment so that patients require renal replacement therapy (TPG).These replacement therapies, including HD, CAPD and kidney transplant(5).

Kidney transplantation is one of the most popular TPGs for ESRD patients in almost all over the world, because ppatients had better life expectancy and long-term

survival than patients undergoing HD and CAPD(6,7). Patients choose a kidney transplant because it has many benefits, namely the patient does not do dialysis, is able to dispose of waste products without the need for equipment, improves nutritional status, improves well-being and productivity, minimizes treatment costs and improves quality of life.(8,9). Kidney transplants not only provide many benefits, but kidney transplants also provide many challenges and changes(10). One of these challenges and changes is psychological changes after kidney transplantation(11).

Psychological changes occur as a result of feelings of anxiety and worry about post-transplant complications, guilt and fear of rejection, treatment regimens and future uncertainty.(12). In addition, they will be faced with increased feelings of anxiety and worry about physical problems and psychological changes that lead to restrictive behavior to reduce the risk of rejection, the long-term implication of which is the ongoing fear of failure of the transplant so that they think that they will have to go on dialysis in the future.(13). According to research Dew et al., (2018), recipients express anxiety caused by fear of needing dialysis again, but this fear can be overcome by adhering to the treatment regimen and following the doctor's recommendations. Kidney transplant affects the patient's next life process, therefore the recipient must be able to adapt to many post-transplant changes including psychological changes(14).

Recipients are at higher risk of experiencing psychological distress after undergoing a kidney transplant and this can be a meaningful process of adaptation, so in-depth exploration of how they describe the psychological changes they experience directly is needed.(15,16). A similar study by F. C. Yang et al., (2020), which examined the adaptation process of male kidney transplant recipients during the recovery stage, obtained five themes, namely, shock during the early post-transplantation stages, re-identification of the transition

period of self-worth, seeking support and positive thinking, accepting a new self-image and regaining autonomy. The results inform about the difficulties faced by male kidney recipients. Nurses can provide assessment, comprehensive and ongoing care to promote healthy adaptation, reduce male physical and mental pain, relieve social and family pressure, and improve quality of life.

Based on the description above, recipients face psychological pressure after undergoing kidney transplantation which is influenced by previous experience and fear of kidney rejection. There are recipients who are able to deal with post-transplantation changes and there are those who are unable to cope with the psychological changes that occur. So it is important to explore more deeply the experience and changes in post-kidney transplant recipients. Various studies have been found regarding kidney transplantation, but in Indonesia there are not many studies related to exploring the psychological adaptation of recipients after kidney transplantation.

Therefore, this study uses qualitative research methods by providing opportunities for recipients to share their experiences of adaptation after undergoing a kidney transplant. This study aims to explore the process of adaptation of recipients after kidney transplantation.

## METHODS

### Study design

The research method used is qualitative research with a phenomenological approach.

The type of phenomenological approach in this study is descriptive phenomenology. Descriptive phenomenology is a philosophy of phenomenology that explores directly and deeply, analyzes and describes the phenomenon under study through the maximum disclosure of the researcher's intuition for the phenomenon under study.

### Sample

Participants in this study were post-kidney transplant recipients in RSUP Dr. M. Djamil Padang. Participant recruitment was carried out using a purposive sampling technique. The inclusion criteria in this study, were:

- 1) Kidney transplant recipients who had undergone transplantation for more than 3 months and regularly attended follow-up appointments,
- 2) Ability to communicate effectively, and
- 3) Willingness to participate and provide informed consent.

### Interview Guideline

Researcher compiled interview guidelines by adopting the theory of the Callista Roy nursing model.

### Data collection procedures

This research was started with the licensing stage, the data collection stage and data processing. At the data collection stage, the researcher conducted interviews online through zoom meetings and face-to-face. Each interview is recorded using the zoom meeting application when online, and face-to-face using an audio recorder. Interviews lasted 35 to 60 minutes for each participant. The researcher immediately made a transcript of the interview results after each interview with one participant. The interview ends when the data is saturated.

Data collection and data processing started from March 2023 to May 2023. Data collection in this study was carried out using in-depth interviews, audio recording and field notes. These techniques were employed to explore the process of psychological adaptation among kidney transplant recipients, allowing participants to express the phenomenon being investigated in-depth. This research

has passed an ethical test from the ethics committee of RSUP Dr. M. Djamil Padang with number: LB.02.02./5.7/160/2023.

### Data Analysis

The stages of the data analysis process in this study used the steps of Colaizzi (1978). The stages of data analysis as follows:

1. Read the entire transcription and field notes to get an overview of the changes in the recipient's psychological adaptation after kidney transplantation
2. Listen to the recording again and read the transcript repeatedly to select meaningful statements
3. Arranging keywords by filtering significant participant statements and arranging them into categories
4. Grouping the categories into groups of sub-themes and themes
5. Integrate all research results in a narrative based on the theme compiled
6. Validate the research results by re-reading the interview transcripts and asking the participants to check whether the data made is in accordance with the conditions of the participants
7. Adding new data found in the validation process

### Thrutworthiness

The validity test of the data in this study using the credibility test by means of triangulation, peer discussions and member checks. Next, the transferability test in this study can not only be applied to post-kidney transplant recipients, but this research can be applied to other populations. Dependability test by conducting auditing activities by supervisors during the proposal and research process and confrimability test by submitting findings documents to participants.

## RESULT

Participants in this study amounted to 6 participants. For participant characteristic data can be seen in table 1 below.

**Table 1. Participant Characteristics**

Code	Age	Work	Religion	Origin of donors	Dialysis duration	Kidney transplant duration
P1	40 years	Civil servant	Islam	Wife	5 years 9 months	8 months
P2	36 years old	Doesn't work	Islam	Mother	2 years 5 months	4 months
P3	45 years	Self-employed	Islam	Siblings	6 years	3 years 6 months
P4	24 years old	Student	Islam	Mother	6 months	1 year
P5	22 years	Doesn't work	Islam	Father	4 years -now	1 year 3 months
P6	58 years	Sailor	Islam	Wife	1 year	8 years

Based on the results of the data analysis, 2 themes were found that explained the psychological changes of recipients after kidney transplantation. The theme of the analysis results can be seen in the following table:

**Table. 2 Analysis Result Theme**

Category	Sub-theme	Theme
Feelings of fear and anxiety	Fear of losing a new kidney	Psychological adaptation transition
Better physical condition	Better psychological feeling compared to previous therapy	
Improve emotional response		
How to deal with anxiety and fear	Strategies for coping with psychological problems	Coping strategies after kidney transplant

### 1. Psychological adaptation transition

#### a. Fear of losing a new kidney

Participants in this study expressed their fear of losing their new kidney, *"If you're worried about having a kidney, but don't think too much about it"* (P4). In addition, there were participants who expressed that they felt anxious and afraid if in the future their kidneys would not function, *"There are occasional thoughts of worry, what if the kidneys can't work anymore. The doctor also said that this kidney might last 5 years, he said...that's what worries me"* (P2).

#### b. Better psychological feeling compared to previous therapy

This theme describes the psychological changes of recipients who previously underwent dialysis to kidney transplants. This response appears since the beginning of post-kidney transplantation. Various emotional responses when facing changes, where the response is inversely proportional when they do dialysis. One of the participants said that he felt calmer and there was no pressure *"When you have CKD, you are more sensitive, more angry, easily offended. For now there have been"*

*many changes mentally such as feeling calmer, because there is no pressure to carry out routine therapy” (P1).*

Other participants also revealed that after undergoing a kidney transplant they had the opportunity to live again so they had the motivation *“when we were still in HD we felt as if we were going to die tomorrow. After the transplant, it's like being motivated to do any activity and there is a sense of being alive again...” (P3).* Two other participants also revealed that their lives had returned to normal. *“Now, thank God, everything has changed, the blood pressure has returned to normal. I can control my emotions now, it's like normal life” (P2).*

## 2. Coping Strategies After Kidney Transplant

Kidney transplantation can have a negative impact on the recipient's psychology. Almost all of the participants said they were worried and worried about the condition of their kidneys in the future, but they had a coping strategy to deal with these feelings, by removing negative thoughts and filling them with positive thoughts and always drawing closer to God by worshiping *“If you're worried, isn't there, right? the doctor said that the kidney might last 5 years, but I don't really think about it... just surrender to Allah, doctors are not God either, they are human beings... get close to God, don't you, carry out your worship, just think a lot positive with God” (P2 ).*

In addition, other participants expressed that they did not feel worried about the condition of the kidneys in the future, but their current condition made them more careful *“... what I'm afraid of is making people who have sacrificed a lot for this process become disappointed... actually that makes me more careful, how can this kidney survive, be careful in eating activities, including being careful in interactions.” (P1).* Other participants said they didn't think too much about feeling anxious and worried about their kidneys in the future, because if all the recommendations were followed,

their condition would be fine. *“Don't think too much either. The important thing is to follow what the doctor said, take medicine regularly... if you suddenly feel anxious, bring the prayer, after that you will feel calm” (P4).*

## DISCUSSION

Kidney transplants provide more changes, including in terms of the recipient's mental health(17). During the interview the participants reported that there were better mental changes after a kidney transplant than before during dialysis. When dialysis they feel not free and have to do therapy, namely dialysis. During dialysis they feel unfit, have a feeling that tomorrow will be their last day and have no motivation. After the kidney transplant they become calmer in life and have no pressure. They feel their mental health is much better(18). This is in line with research by Tucker et al., (2019) in his research stated that post-kidney transplant changes are not only limited to physical health or lifestyle, but can provide substantial psychological benefits. Where the patient expresses feelings of freedom and gratitude for having the opportunity to live(13).

Post-transplant, recipients report a positive response and express great gratitude when receiving the 'gift of life' but this gift can cause negative emotions as a result of post-transplant complications(12). Even though there is a positive response after transplantation, nurses must also be able to identify the recipient's feelings of anxiety and worry about the kidney in the future(11,12,19). It is very important to manage potential mental conflicts such as anxiety and worry during the recovery and treatment phases to ensure that psychological needs are met(19,20).

Each participant has a different strategy in dealing with post-kidney transplant problems. Knowing strategies for coping with emotional and physical health issues can help reduce stress and anxiety(19,21). This is in accordance with the results of this study that their strategy for overcoming

feelings of anxiety and worry is by worshiping, surrendering to God, positive thinking, obediently taking medication and following the doctor's recommendations. According to research Valizadeh Zare et al., (2018) that if they have the patience and tolerance for the current post-transplant problems, they will achieve a peaceful life without re-dialysis. In interpreting this sentence, God with all His favors and help plays a very important role. Trusting God's power gives them serenity and less fear of changing conditions (14). This research also proves that their relationship with God increases. Participants considered God as the main intermediary that led them to undergo kidney transplants.

This can be managed by getting family and social support. Research by Lonargáin et al., (2017) shows that the presence of family and social support will reduce feelings of anxiety and worry about kidney conditions in the future (19). Such support can strengthen family ties to avoid psychological separation and prevent treatment nonadherence (20,22). Facilitated support from family members has a variety of adaptive behaviors that are useful for gaining recipient strategies, abilities, and confidence (23). Family and social support is very influential on the process of psychological adaptation of participants (21). When recipients receive family and social support (friends, neighbours, co-workers and so on) in any form, that support can have a buffering effect by managing stress and anxiety, thereby improving post-kidney transplant mental health. (21,24).

## CONCLUSION

This study shows that kidney transplantation provides changes including psychological changes that have a major impact on recipients in living their lives in the future. Even though kidney transplants have had a positive impact, they still have feelings of anxiety and worry about the condition of their kidneys in the future. Therefore, support from family and social

as well as nurses is needed in building the mental health of post-kidney transplant recipients.

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