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THE RELATIONSHIP BETWEEN BODY IMAGE AND SELF-ACCEPTANCE IN PATIENTS UNDERGOING HEMODIALYSIS

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Abstract

Introduction: Hemodialysis is a medical procedure that often causes significant physical changes, such as weight loss, swelling, and skin changes that can affect the patient's body image. The long-term process of hemodialysis also has the potential to interfere with psychological conditions, especially patient self-acceptance.

Objective: This study aims to determine the relationship between body image and self-acceptance in patients undergoing hemodialysis.

Methods: This type of research is quantitative research with a cross-sectional approach. The population of this study were all patients undergoing hemodialysis at Sidoarjo Regional Hospital as many as 200 respondents. The sample size was 133 respondents selected using a simple random sampling technique. The independent variable is body image and the dependent variable is self-acceptance. The instrument of this study was a questionnaire. Analysis using the Spearman Rank test.

Results: The results of this study indicate that 54.9% experience negative body image and 41.4% experience low self-acceptance. Based on the results of the analysis obtained a correlation coefficient of 0.601 which means it has a strong relationship with, $p\text{-value} = 0.000$.

Conclusions: Patients who have a positive body image tend to show a higher level of self-acceptance of their physical condition.

INTRODUCTION

A person who has been diagnosed with end-stage Chronic Kidney Disease (CKD) requires kidney replacement therapy. The therapy that is often carried out by CKD patients is hemodialysis therapy (Pratiwi & Suryaningsih, 2020). Hemodialysis is a treatment carried out to help CKD patients survive (Wiliyanarti & Muhith, 2019). But not only providing benefits, hemodialysis can also cause various problems and complications, such as weight loss, swelling, and skin discoloration which can ultimately cause body image disturbances in patients. This can cause patients to feel uncomfortable and unable to accept themselves, which in turn can lead to stress, anxiety, and depression. In addition, such body image disturbances can affect the patient's spiritual well-being and social relationships.

Renal failure has become a global health problem due to increasing incidence and mortality rates. Based on data from the World Health Organization (WHO), in 2020 patients with chronic kidney failure were 254,028 cases and the prevalence of those undergoing hemodialysis worldwide was 1.5 million people (WHO, 2020). Basic Health Research (Riskesdas) data in 2018, the highest number of chronic kidney disease patients occurred at the age of 65-74 years (8.23%). The second highest was at the age of 75 years and above and the third was at the age of 55-64 years at 7.21% with a higher prevalence for men at 4.17% and for women at 3.52%. Data from the Ministry of Health shows that the prevalence of chronic kidney disease in Indonesia is 1,417,104 cases and around 60% of people with chronic kidney disease undergo hemodialysis (Kemenkes RI, 2023). Data obtained at Sidoarjo Regional Hospital 899 patients with chronic kidney disease underwent hemodialysis in January-December 2023.

Body image is an individual's perception of their physical appearance and body function, which includes cognitive, affective, and behavioral aspects. Based on theory, this perception is strongly influenced by personal experiences, cultural values, as well as feedback from the social environment. When individuals experience significant body changes such as hemodialysis patients, their ability to self-acceptance may be compromised (Istiowati et al., 2023; Faridah et al. 2022).

Self-acceptance is an important aspect of mental health, reflecting the extent to which a person can accept themselves as a whole, including physical weaknesses and imperfections. In the context of hemodialysis patients, self-acceptance includes not only acceptance of the disease condition but also of the body image that may no longer conform to social expectations or norms (Oktaviani, 2019; Agustin et al., 2019; Wijayanti et al., 2022). Permanent or chronic physical changes can lead to decreased self-esteem, dissatisfaction with the body, and inner conflict that leads to self-rejection (Sari, 2018). Therefore, it is important to examine the relationship between body image and self-acceptance in hemodialysis patients, to understand the psychological factors that influence their adaptation to this chronic condition.

Objectives: The purpose of this study is to analyze the relationship between body image and self-acceptance in patients undergoing hemodialysis.

METHODS

Study Design

This research is a quantitative study with a cross-sectional design, which is a type of research where observational data from research respondents is only measured in one observation. The independent variable in this study is body image, while the dependent variable is self-acceptance in patients undergoing hemodialysis.

Settings

This study was conducted at Sidoarjo Regional Hospital, East Java Province, conducted in 2024.

Research subject

The population in this study were all patients undergoing hemodialysis 200 people. the research sample was patients undergoing hemodialysis with research inclusion criteria including cooperative, undergoing hemodialysis 2 times a week, and undergoing hemodialysis ≥ 6 months. The sample size in this study was 133 patients using the Slovin formula:

$$n = \frac{N}{1 + N(d)^2}$$

The sampling technique in this study used simple random sampling.

Instruments

The body image questionnaire research instrument uses the appearance scale from Jersild because this scale is used to measure Physical Self-Image, Psychological, and Social Self-Image. The questionnaire in this study adopted research conducted by Kurniawan et al. (2021). This questionnaire has 15 questions and has been tested for validity and reliability. Based on the validity test, the Product Moment correlation value is the calculated value > 0.481 so it is declared valid and the Cronbach Alpha test value is 0.681.

The self-acceptance questionnaire uses unconditional self-acceptance which has been developed and modified by Hasan (2018) by the aspects of self-acceptance taken and adapted to respondents in chronic kidney patients undergoing hemodialysis. The aspects of self-acceptance used include feeling valuable, taking responsibility, believing in one's abilities, self-orientation, accepting praise and criticism, and realizing limitations. The self-acceptance questionnaire consists of 12 statements. The instrument has been tested for validity and reliability, and the Product Moment correlation value (t count) is 0.536 to 0.820. This shows that all statement items are valid because the calculated t value is greater than the t table value (0.482). The reliability test results show the Cronbach Alpha value of 0.899.

Data collection

Data collection was carried out by distributing questionnaires to respondents. Previously the researcher explained to the respondent regarding the research, then the respondent signed an informed consent, and then the respondent was asked to fill out the questionnaire used in this study

Data Analysis

The research used the Spearman Rank correlation test with the help of the SPSS for Windows version 22 program. The results of the study are presented in the form of tables and narratives to describe the relationship between factors related to body image and self-acceptance.

Ethical Consideration

This research has obtained permission and ethical feasibility at KEPK Sidoarjo Hospital with No. 000.9.2/050/438.5.2.1.1/2024. Ethical principles need to be upheld to maintain the integrity of researchers and protect respondents from human rights violations. In this study, researchers used ethical

aspects of research, namely informed consent, anonymity, confidentiality, non-maleficence, veracity, and justice.

RESULTS

The results of the study are described in the distribution of respondent characteristics (table 1), Body Image and Self-Acceptance (table 2), and the relationship between the two variables (table 3) as follows:

Table 1. Frequency Distribution Based on Respondent Characteristics (n=133).

Characteristics	Frequency (n)	Percentage (%)
Age		
26 – 35	7	5.3
36 – 45	15	11.2
46 – 55	75	56.4
56 – 65	25	18.8
> 65	11	8.3
Gender		
Male	80	60.2
Female	53	39.8
Education		
No school	11	8.3
Elementary Education	46	34.6
Middle Education	52	39.1
Higher Education	24	18
Long time on hemodialysis (month)		
<6	17	12.8
6-12	49	36.8
>12	67	50.4
Marital status		
Married	98	73.7
Unmarried	35	26.3
Employment status		
Working	56	42.1
Not working	77	57.9

Sources: Primary Data Questionnaire, 2024

Table 1 shows that of the 133 respondents who underwent hemodialysis at Sidoarjo Regional Hospital, most were aged in the range of 46-55 years (56.4%), most of the respondents were male (60.2%), almost half of the respondents had secondary education (39.1%), most of the respondents were married (69.2%), most of the respondents did not work (57.9%), half had undergone hemodialysis for >12 months (50.4%).

Table 2. Frequency Distribution of Respondents Based on Body Image and Self-Acceptance.

Characteristics	Frequency (n)	Percentage (%)
Body image		
Negative	73	54,9
Positive	60	45,1
Self-Acceptance		
Low	55	41,4
Medium	36	27,1
High	42	31,6
Total	133	100

Sources: Primary Data Questionnaire, 2024

Based on table 2 shows that most of the respondents experienced negative body image (54.9%) and almost half of the respondents had low self-acceptance (41.4%).

Table 3. Frequency Distribution of The Relationship Between Body Image and Self-acceptance.

No	Body image	Self Acceptance						Total	
		Low		Medium		High			
		f	%	f	%	f	%	f	%
1.	Negative	47	35,4	20	15,1	6	4,5	73	54,9
2.	Positive	8	6,0	16	12,0	36	27,1	60	45,1
	Total	55	41,4	36	27,1	42	31,6	133	100,0
Uji Rank Spearman								$\rho = 0,000$	
Correlation Coefficient								0,601	

Sources: Primary Data Questionnaire, 2024

Based on table 3 shows that of the 73 respondents who had a negative body image, most (35.4%) experienced low self-acceptance. While 60 respondents who have a positive body image are found to be a small proportion (6%) of respondents experiencing low self-acceptance. Based on the results of the Spearman Rank test with a significant level of 0.000 (<0.05) which means that there is a relationship between body image and self-acceptance in patients undergoing hemodialysis, with the correlation coefficient of 0.601 which shows a strong relationship.

DISCUSSION

Based on the results of the study, show that there is a relationship between body image and self-acceptance in patients undergoing hemodialysis ($p < 0.05$) and a correlation coefficient of 0.601 is obtained, which means that there is a strong correlation relationship with positive or unidirectional research direction. Patients who have been diagnosed with chronic kidney disease and must undergo hemodialysis therapy will often experience changes. Visible changes are physical changes such as weight loss, dry skin, itching, swelling in the abdomen, eyes, hands, and feet, as well as changes in skin color due to medication and hemodialysis procedures. When hemodialysis patients feel dissatisfied with their body image, this can worsen their self-acceptance and make it difficult for them to adapt to new

conditions (Sharif Nia et al., 2022; Wijayanti et al., 2022) Not only physical changes but psychological changes that make patients feel bored doing hemodialysis which can cause patients to despair, often blaming themselves for the conditions they experience (Tadesse et al., 2021).

This study is supported by previous research which shows the results that self-concept and self-acceptance are low. The relationship between self-concept and self-acceptance in patients largely indicates that they are unable to adjust to the limitations resulting from their illness. These limitations also cause them to lose the ability to carry out their roles, and most are very dependent on others to fulfill their basic needs (Sevil & Gökçe, 2020; Sharif Nia et al., 2022). Another study stated that chronic renal failure patients often have a negative perception of their bodies, not accepting changes such as breath odor, dry and blackened skin, itchy skin, and swelling in the abdomen, eyes, hands, and feet (Malfasari et al., 2023). Patients feel embarrassed in front of their family and community due to these physical changes (Wijayanti et al., 2023).

Based on the results of the study, most (54.9%) respondents experienced a negative body image. Physical changes that often occur include blackened skin, itching, and swelling in the abdomen, eyes, hands, and feet. The results of this study are in line with previous research that the body image of chronic renal failure patients undergoing hemodialysis is mostly negative (Malfasari et al., 2023). Body image is the perception, feelings, and attitudes of individuals about their bodies both internally and externally towards their physical characteristics and abilities, and is influenced by personal views and other people (Hosseini & Padhy, 2024; Istiowati et al., 2023). Patients with hemodialysis often experience physical and behavioral changes, such as changes in body size and shape and movement limitations (Motedayen et al., 2014). Various problems and complications can occur in patients undergoing hemodialysis. Body image disturbance is one of the main problems experienced by chronic renal failure patients undergoing hemodialysis, due to changes in body function and structure (Tajbakhsh et al., 2023).

Several factors influence body image, such as gender, age, mass media, ethnicity and culture, family, interpersonal relationships, and body mass index (Shoraka et al., 2019). Most respondents (60%) were male, with half having a positive body image and the other half a negative one. Men are less aware of or concerned about their body image and are more comfortable with themselves, compared to women who often feel pressured by physical changes and try to meet certain standards. (Riqi & Nurwidayanti, 2019; Sharif et al., 2022).

Based on the results of the study, a small proportion (22%) of respondents with primary education had a negative body image, and 22% of respondents with secondary education had a positive body image. The results of this study are by the theory that education is the main basis for successful treatment. Education affects a person's knowledge about chronic kidney failure and the side effects that occur when performing hemodialysis therapy, someone who does not have enough knowledge due to low education is likely to feel pressure and frustration when undergoing hemodialysis therapy because of drastic body changes (Gultom & Sukmarini, 2012; Wijayanti et al., 2024).

The results showed that almost half of the patients (41.1%) experienced low self-acceptance. Low self-acceptance in hemodialysis patients can be caused by feelings of fear because the disease does not get better and feelings of worthlessness or being a burden to the family. The results of this study are in line with research conducted by Malinda et al., (2022) showing that most patients have low self-acceptance. In patients undergoing hemodialysis, self-acceptance is very important to help them adapt to the changing physical and emotional conditions due to the disease and medical procedures they undergo. Self-acceptance includes understanding that even though their bodies are changing, they still have the same value and deserve good attention and care (Fathy et al., 2017).

LIMITATIONS

This study has weaknesses, namely the population used in only one hospital so that it can limit the generalization of research results to a wider population and this study only focuses on body image and self-acceptance so that suggestions for future researchers increase the number of populations and wider hospitals. Other factors can be considered in future studies such as social support, mental health status, or level of knowledge about the disease because these factors can play an important role in shaping patients' views of their bodies and self-acceptance.

CONCLUSION

There is a significant positive relationship between body image and self-acceptance in patients undergoing hemodialysis. Patients who have a more positive body image tend to show a better level of self-acceptance of the physical conditions they experience due to the hemodialysis process. Conversely, patients who have a negative body image tend to have difficulty accepting the physical changes that occur during the treatment process. Therefore, medical personnel and psychologists need to provide psychological support that focuses on improving hemodialysis patients' body image and self-acceptance, to help them deal with the physical and emotional challenges that arise during treatment.

It is also necessary to integrate psychological support in providing care to patients undergoing hemodialysis so that patients can adapt to their illness and improve their quality of life.

AUTHOR CONTRIBUTION

Lono Wijayanti: Writing original article draft, conception, and methodology.

Mitha Wulan Anggraini: Writing collection and assembly of data.

Siti Nurjanah: Writing analysis and interpretation of the data.

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CONFLICT OF INTEREST

There is no conflict of interest in this research.

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