



#### **Research Article**

# **Body Images of Chronic Renal Failure Patients Undergoing Hemodialysis**

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#### Abstract.

Chronic kidney failure is a progressive and irreversible kidney damage in which there is an occurrence of being unable to transport the body's metabolic waste or its regular functions, thus requiring hemodialysis therapy. Hemodialysis causes changes in body image such as physical weakness, nausea, vomiting, balance disorders, increased levels of uremic in the blood, muscle aches, and edema. This study aims to determine the body image of patients with chronic kidney failure undergoing hemodialysis. A descriptive quantitative research design was carried out in the Indonesian dialysis patient community (KPCD) Pekanbaru, the sample of this study was 49 respondents using a total sampling technique. The measuring instrument used was a questionnaire body image variable from previous research. The analysis used was descriptive with a univariate test. The results showed that 57.1% of respondents had disturbed body images and 42.9% of respondents had undisturbed body images. It means that hemodialysis patients need nursing intervention to reduce disturbed body image.

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# 1. INTRODUCTION

Chronic Renal Failure is a clinical condition of progressive and irreversible kidney damage from various causes where there is an incidence of being unable to transport the body's metabolic waste or perform its regular functions (1). The results of Riskesdas in 2018 showed that the pervalence of Chronic Kidney Failure disease in Indonesia ≥ 15 years based on doctor's diagnosis was 19.8% in 2018, an increase compared to the previous year (2). One of the efforts to reduce the risk of death in this disease is to undergo hemodialysis. Hemodialysis is a stage that aims to remove fluids and waste products from the body when one of the kidneys is unable to carry out the process and makes the patient dependent (3). Because of experiencing declining kidney function coupled with having to do hemodialysis, the patient feels uncomfortable with his own body. This can be said to be a body image disorder. Body image disorder

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is one of the problems experienced by chronic kidney failure patients undergoing HD due to changes in the patient's body structure function (4). Signs and Symptoms of a person experiencing body image disorders are such as refusing to see and touch body parts that have changed, not accepting body changes that have occurred or will occur, rejecting explanations of body changes, negative perceptions of the body. preoccupation with missing body parts, and expressing despair and fear (5). From the medical record data of Arifin Achmad Hospital Pekanbaru in 2019 and 2020 chronic renal failure patients who underwent hemodialysis in October totaled 109 patients, November amounted to 150 patients, and December amounted to 119 patients. Based on a preliminary study conducted by the author on February 22, 2020 by interviewing 8 chronic Renal Failure patients undergoing hemodialysis therapy, 6 of them were found to have signs and symptoms of body image disorder. The patient admits to having negative perceptions of his own body such as dry skin, blackened skin, itchy skin, coughing, paralysis due to shrinking legs, restricted patient drinking, eye loss, hands, feet, and stomach swelling. When asked about their feelings about their physical condition after undergoing hemodialysis therapy, 6 patients felt embarrassed to interact or meet the community or family due to changes that occurred in the patient's body as side effects of hemodialysis. When asked about his congenital aspects, 6 of them admitted that they were dissatisfied with the condition of their body and 2 others said they had accepted their current stage and said this was an ordeal on them because the disease does not care about age, occupation and gender, and the patient was also resigned to all medical actions. The statement of the preliminary study proved indirectly that almost all patients have a negative perception of their own body since undergoing hemodialysis. The purpose of this study was to determine the body image picture of Chronic Renal Failure patients undergoing hemodialysis.

# 2. MATERIALS AND METHODS

This research was a quantitative study. The research design used was descriptive. The samples were 49 members of the Indonesian Dialysis Patient Community (KPCDI) Pekanbaru who suffered Kidney Failure patients undergoing hemodialysis selected through total sampling technique. The instrument used body image questionnaire that had been tested for validity and reability consisted of 20 Questions (6). This research was analyzed by using univariate analysis to assess the characteristics and body image of patient with hemodialysis. This research has also been declared to have passed ethical exemption with 0063/STIKES PN/KEPK/VI/2022.



## 3. RESULTS

The table below is the age characteristics of the patient who were undergoing hemodialysis.

TABLE 1: Age of Respondents who Underwent Hemodialysis.

Variable	Minimum	Maximum	Mean	Standard Deviation
Age	36	62	47,65	6,7

Based on the table above, the mean age of patients in this research is 47, 65. The youngest respondents is in 36 years old, and the oldest one is in 62 years old with Standar Deviation in 6.7 Years old.

TABLE 2: Characteristics of Respondents.

No	Variables			Frequency	Percentage (%)
1	Sex	Male		18	36,7
		Female		31	63,3
2	Education	College		5	10,2
		Senior School	High	24	49
		Junior School	High	13	26,5
		Elementary School		7	14,3
3	Job	Public Servar	nt	4	8,2
		Private Servant		7	14,3
		Entrepreneur		13	26,5
		Unemployed		25	
4	Length of Hemodialysis	< 1 Year		18	36,7
		1-2 Years		21	42,9
		3-4 Years		10	20,4
5 Cost of treatment		Public Insurance		46	93,9
		Personal Account		3	6,1
6	Body Image	Disturbed		28	57,1
		Undisturbed		21	42,9

Base on the table above, majority of respondents is women about 63,3%. Senior high school is the most level of education (49%) of the sample in this research and most of them are not working anymore. The majority of samples have 1-2 years length of hemodialisys (42,9%) with most of them use public insurance (93,9%) (In Indonesia, well known as BPJS Kesehatan). Based on the data, most of sampel have disturbed body image in the amount of 57,1 %.



## 4. DISCUSSION

Based on the result of this research, age mean of the patients with hemodyalisis was 47,65 years old. The average age of the samples in this study was in middle age category range (7). The results showed that the older a person is, the better the ability of the individual's body to adapt to diseases includes adapting to psychological coping and maintaining body image (8).

The results of this study showed that of the 49 respondents who were part of the hemodialysis community in Pekanbaru were women. The large number of women as part of this research sample is supported by the results of studies that show that women are the gender that suffers the most from Chronic Kidney Failure compared to men (9). Women are also the most vulnerable gender to risk when undergoing dialysis because of their body anatomy condition, so the mortality rate for women suffering from hemodialysis is quite high (10). In addition, women also psychologically have a low quality of life compared to men with hemodialysis (11). If we look at the incidence of body image disorders, gender does not affect a person will be disturbed or not disturbed by their body image, this is in line with a study in Iran entitled The Correlation Between Self-Care Behavior and Concerns About Body Image in Patients Undergoing Hemodialysis (10).

The next characteristic response is the level of education. This research sample's average level of education is senior high school graduate. The results of the study confirmed that the level of education affects a person's sensitivity to his body image during hemodialysis (13). However, this study statistically did not show a significant correlation between the level of education and the incidence of body image disorders in patients with hemodialysis.

The results of the analysis showed that 28 respondents (57.1%) experienced disturbed body image. Meanwhile, respondents with undisturbed body image were 21 respondents 42.9%. This study is in line with the study by Sutami, (2012) on the analysis of the correlation between changes in body image and coping mechanisms in chronic renal failure patients undergoing hemodialisa therapy, found that body image disturbed was experienced by 11 respondents (73.3%). This study is also in line with the results of research related to the cause of body image disorders experienced by patients with hemodialysis: a change in body shape in the amount of 56.7% patients felt uncomfortable due to changes in body shape (14). Thus it can be concluded that there are changes in body structure function and hemodialysis actions will cause chronic kidney failure patients to experience body image disorder.



This research is also supported by Keliat's theory (15) stating that various physical problems can cause psycho-social problems in individuals. Changes in the body's structure, shape and function can give rise to different feelings and reject the new physical appearance. If not addressed well, this problem can lead to severe psychosocial problems. Chronic diseases such as kidney disease can affect an individual's body image, since the body is no longer able to function optimally. Various pharmacological therapies, weight gain or loss can also affect the occurrence of image disorders (16). Various renal replacement therapies such as hemodialysis have a negative impact on self-image of Chronic Renal Failure patients.

# 5. CONCLUSION

The results showed that 57.1% of respondents had disturbed body image and 42.9% of them had undisturbed body image.

#### **ACKNOWLEDGMENTS**

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## **CONFLICT OF INTEREST**

There is no conflict of interest in this research.

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