
Original Research Article Outline:

**THE RELATIONSHIP BETWEEN THE LONG TIME ON
HEMODIALYSIS AND THE LEVEL OF DEPRESSION IN CHRONIC
KIDNEY FAILURE PATIENTS IN THE HEMODIALYSIS ROOM
SANTOSA HOSPITAL BANDUNG CENTRAL
(SHBC)**

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ABSTRACT

Introduction. The prevalence of depression cases in the world is around 17% of all mental disorders in society. This figure is the largest compared to other mental disorders. This condition will increase under certain conditions, for example in patients with certain medical conditions who experience chronic illnesses such as stroke, diabetes, cancer and chronic kidney failure. Patients with chronic kidney failure who are required to undergo hemodialysis will increase the risk of depression, this is caused by stressors that arise such as dependence on hemodialysis machines for life, changes in lifestyle patterns related to long periods of undergoing hemodialysis, restrictions on food and drink patterns and adaptation to disease condition. The aim of this study was to determine the relationship between the length of time undergoing hemodialysis and the level of depression in chronic kidney failure patients in the SHBC hemodialysis room. **Method.** This research is a quantitative correlation research with a *cross sectional approach* or also called a *point time approach*. The sampling technique used in this research was *Accidental Sampling* of 92 respondents using the *Beck Depression Inventory (BDI)* questionnaire. **Result & Analysis.** Based on the results of statistical tests, the *p-value* = 0.038 ($p < 0.05$). **Discussion.** In this study, it can be concluded that there is a relationship between the length of time undergoing hemodialysis and the level of depression in chronic kidney failure patients in the SHBC hemodialysis room in 2022. Patients with chronic kidney failure have many stressors that arise while undergoing hemodialysis, for this reason families and nurses can provide motivation to patients with chronic kidney failure so that they can reduce the level of depression.

Keywords: length of hemodialysis, level of depression, chronic kidney failure

INTRODUCTION

Chronic kidney disease is a decrease in kidney function for at least 3 months, which is characterized by a *glomerular filtration rate* (GFR) <60 mL/min/1.73m². Patients with chronic kidney failure need kidney replacement therapy to maintain body function. Dialysis (hemodialysis) is currently the most popular choice. Chronic kidney failure patients must undergo hemodialysis for the rest of their lives. Patients undergoing hemodialysis for a long time require good adaptation.

This loss of interest in life and decreased mood can be categorized as a mental disorder called depression. Depression is usually associated with the hope of healing in patients with chronic medical conditions.

Interviews were conducted using a questionnaire. Of the 10 patients who had chronic kidney disease and underwent hemodialysis at SHBC, there were 6 patients classified as mild depression, which is characterized by the characteristics of having feelings of worthlessness and

helplessness, being lazy about doing activities, having no appetite. According to the patient's statement, they feel that they are experiencing depression according to their current situation, feel pessimistic about the future, cannot carry out normal activities, as well as feeling like a bother to other people, often feeling guilty, losing interest.

METHOD AND ANALYSIS

This research is a quantitative correlation research with a *cross sectional approach* or also called a *point time approach*. The independent variable in this study is the length of time undergoing hemodialysis and the dependent variable in this study is the level of depression. The population in this study was 120 people. The sample was calculated using the Slovin formula with results of 92 respondents. The sampling technique used was *Accidental Sampling* of hemodialysis patient respondents using the *Beck Depression Inventory* (BDI) questionnaire.

RESULT

Table. Frequency Distribution of Time Undergoing Hemodialysis

Long time undergoing hemodialysis	Frequency	Percentage
≤12 Months	37	40.2
>12 Months	55	59.8
Total	92	100.0

Based on Table 1 it is known that there were 37 respondents who had undergone Hemodialysis for less than or equal to 12 months or 40.2% of the total of 92 respondents. Meanwhile,

there were 55 respondents who had undergone hemodialysis for more than 12 months or 59.8% of the total of 92 respondents.

Table 2. Frequency Distribution of Depression Levels

Depression Levels	Frequency	Percentage
No Depression	22	23.9
Mild Depression	17	18.5
Moderate Depression	22	23.9
Major Depression	31	33.7
Total	92	100.0

Based on table 4.2, of the 92 respondents who answered the questionnaire containing questions about the level of depression from researchers, it is known that 22 respondents did not have depression or 23.9% of the total respondents. There were 17 respondents who

experienced mild depression or 18.5% of the total respondents. There were 22 respondents who experienced moderate depression or 23.9% of all respondents. There were 31 respondents who experienced severe depression or 33.7% of the total respondents.

Table 3. Relationship between length of time undergoing hemodialysis and level of depression

Long time undergoing hemodialysis	Depression Levels								Total	P value	
	No Depression		Mild Depression		Moderate Depression		Major Depression				
	n	%	n	%	n	%	n	%			
≤12 Months	5	13.5	4	10.8	11	29.7	17	45.9	37	100	0.038
>12 Months	17	30.9	13	23.6	11	20.0	14	25.5	55	100	
Total	22	23.9	17	18.5	22	23.9	31	33.7	92	100	

Based on table 3 it is known that there were 22 respondents who did not have depression. Of the 22 respondents, there were 5 respondents (22.7%) with a duration of hemodialysis of ≤ 12 months and 17 respondents (77.3%) with a duration of hemodialysis of >12 months. Of the 17 respondents who experienced mild depression, there were 4 respondents (23.5%) with a duration of hemodialysis of ≤ 12 months and 13 respondents (76.5%) with a duration of hemodialysis of >12 months. Of the 22 respondents who experienced moderate depression, there were 11 respondents (50%) with a duration of hemodialysis of ≤ 12 months and 11

DISCUSSION

Based on the data above, it can be seen that of the 37 respondents who underwent hemodialysis, there were 5 respondents (13.5%) who did not experience depression and the remaining 32 respondents (86.5%) experienced depression. This can happen because patients undergoing hemodialysis for less than or equal to 12 months are criteria for new patients undergoing hemodialysis, where new patients require good adaptation to the hemodialysis therapy process.

The percentage of depression in patients who have undergone hemodialysis for more than 12 months is smaller than the percentage of depression in respondents who

respondents (50%) with a duration of hemodialysis of >12 months. Of the 31 respondents who experienced severe depression, there were 17 respondents (54.8%) with a duration of hemodialysis of ≤ 12 months and 14 respondents (45.2%) with a duration of hemodialysis of >12 months. Based on the results of statistical tests, it was found that *the p-value* = 0.038 ($p < 0.05$) which means there is a relationship between the length of time undergoing hemodialysis and the level of depression in hemodialysis patients in the SHBC hemodialysis room in 2022.

have undergone hemodialysis for less than or equal to 12 months, namely 69.1% of respondents who have undergone hemodialysis for more than 12 months. and as many as 86.5% of respondents underwent hemodialysis for less than or equal to 12 months. This can happen because patients who have undergo hemodialysis for more than 12 months are the criteria for long-term patients, where patients who have undergone hemodialysis for a long time have begun to have a good adaptation pattern. The longer a patient undergoes hemodialysis, the more the patient will be able to adapt to the condition of the disease they are experiencing, thus having an impact on the individual coping of the patient who is able to manage the stressors that come, thereby reducing the level

of depression in the patient.

CONCLUSION

- a. Most of the hemodialysis patients in the SHBC hemodialysis room in 2022 have been undergoing hemodialysis for more than 12 months, namely 55 people (59.8%).
- b. Hemodialysis patients in the SHBC hemodialysis room in 2022 mostly experienced mild to severe levels of depression, occurring in patients undergoing hemodialysis for less than or equal to 12 months (new patients), namely 37 people (86.5%)
- c. There is a relationship between the length of time undergoing hemodialysis and the level of depression in chronic kidney failure patients in the SHBC hemodialysis room in 2022. *P-value* = 0.038 ($p < 0.05$).

SUGGESTION

- a. For Santosa *Hospital* Bandung Central
- b. This research can be used as a reference in providing motivation to kidney failure patients undergoing hemodialysis in the SHBC hemodialysis room. Where the motivation given aims to find

out the stressors that the patient will experience. In this way, patients are able to adapt to stressors that may arise during the hemodialysis process.

- c. For Educational Institutions
- d. It is hoped that this research can add to existing references and increase students' knowledge in the field of mental nursing, especially students in the nursing science study program at STIKes Budi Luhur Cimahi.
- e. For future researchers
- f. Future researchers can continue this research by using other independent and dependent variables such as intra-dialysis complications, dialysis access punctures, the burden of dialysis therapy costs, disturbances in the body image of hemodialysis patients, and so on.

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