

 <p>ISSN (O): 2320-5407 ISSN (P): 3107-4928</p>	<p>Journal Homepage: - <a href="http://www.journalijar.com">www.journalijar.com</a></p> <h2>INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)</h2> <p>Article DOI: 10.21474/IJAR01/23159 DOI URL: <a href="http://dx.doi.org/10.21474/IJAR01/23159">http://dx.doi.org/10.21474/IJAR01/23159</a></p>	
--	---	---

### RESEARCH ARTICLE

## EFFECTIVENESS OF GROUP THERAPY ON PSYCHOLOGICAL WELL-BEING AMONG PATIENTS UNDERGOING HEMODIALYSIS

Pavithra T, Rajalakshmi and R. Renuka

1. Department of Mental Health Nursing, Sree Abirami College of Nursing, Coimbatore, Tamil Nadu, India.

### Manuscript Info

#### Manuscript History

Received: 12 February 2026

Final Accepted: 15 March 2026

Published: April 2026

#### Key words:-

Group therapy, Psychological well-being, Hemodialysis, Chronic kidney disease, Effectiveness, Assess.

### Abstract

**Background:** Chronic Kidney Disease (CKD) is a progressive condition characterized by kidney damage or a decreased glomerular filtration rate (eGFR < 60 ml/min/1.73 m<sup>2</sup>) for more than three months. It can progress to end-stage renal disease, requiring dialysis or kidney transplantation. Hemodialysis, the most commonly used treatment, imposes significant physical and psychological burdens, adversely affecting patients' quality of life. Psychological well-being is often compromised in these patients, necessitating appropriate interventions such as group therapy.

**Objectives :** To assess the level of psychological well-being among patients undergoing hemodialysis, To evaluate the effectiveness of group therapy on psychological well-being among these patients, To determine the association between psychological well-being and selected demographic variables.

**Methods :** A quantitative research approach with a quasi-experimental pretest–posttest control group design was adopted for this study. The study was conducted among 60 patients undergoing hemodialysis. Purposive sampling technique was used to select participants who met the inclusion criteria. Data were collected using a modified structured interview questionnaire. The content validity of the instrument was established by five experts, including three nursing experts and two medical experts in the field of psychiatry. The reliability of the tool was established using the test–retest method, and the reliability coefficient was found to be  $r = 0.82$ , indicating good reliability. The study was conducted after obtaining approval from the hospital ethical committee and the research committee of Sree Abirami College of Nursing. The nature and purpose of the study were explained to the participants, and informed written consent was obtained prior to data collection.

"© 2026 by the Author(s). Published by IJAR under CC BY 4.0. Unrestricted use allowed with credit to the author."

Group therapy was administered to the experimental group after the pretest, and the posttest was conducted on the 15th day. The collected data were analyzed using both descriptive and inferential statistics, including paired and unpaired t-tests and the chi-square test.

**Corresponding Author:-**Pavithra T

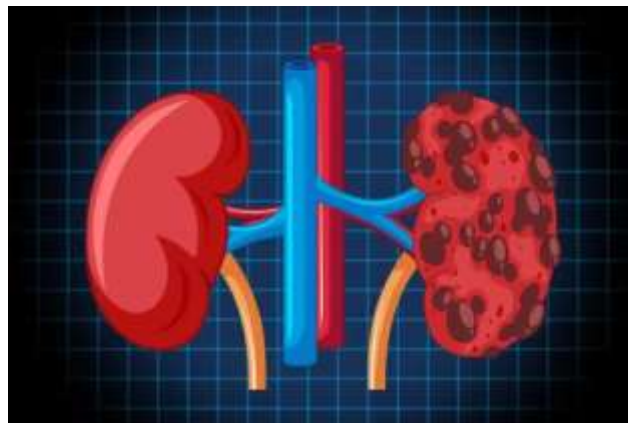
**Address:-**Department of Mental Health Nursing, Sree Abirami College of Nursing, Coimbatore, Tamil Nadu, India.

**Results :** The mean pretest psychological well-being score was 6.2, while the mean posttest score increased to 24.5. The calculated t-test value was 15.12, which was statistically significant at  $p < 0.05$ . No significant association was found between psychological well-being and selected demographic variables. **Conclusion :** The study concludes that group therapy is highly effective in improving psychological well-being among patients undergoing hemodialysis. Incorporating structured group therapy interventions into routine care may enhance mental health outcomes in this population.

**Introduction:-**

Chronic Kidney Disease (CKD) is defined as the presence of kidney damage or a decreased estimated glomerular filtration rate (eGFR  $< 60$  ml/min/1.73 m<sup>2</sup>) for a period of three months or more, irrespective of the underlying cause. It is a progressive and irreversible condition that leads to a gradual decline in kidney function and may ultimately result in end-stage renal disease, requiring renal replacement therapy such as dialysis or kidney transplantation. Kidney damage is identified through abnormalities in imaging studies, renal biopsy findings, urinary sediment, or increased urinary albumin excretion. The Kidney Disease: Improving Global Outcomes (KDIGO) 2012 classification recommends staging CKD based on glomerular filtration rate and albuminuria levels, allowing for better assessment and management of disease progression. CKD is recognized as a major non-communicable disease affecting millions of individuals worldwide, including a considerable population in India. It is often referred to as a “silent disease” because it progresses without early symptoms, and many patients may lose up to 90% of their kidney function before clinical manifestations become evident, eventually progressing to end-stage renal disease.

Hemodialysis is the most commonly used treatment modality for patients with advanced CKD. It involves the use of a machine to remove waste products and excess fluid from the blood, thereby replacing kidney function. Although it is life-saving, hemodialysis is time-consuming, typically requiring multiple sessions per week, each lasting several hours, along with strict fluid and dietary restrictions. These factors significantly affect the daily lives of patients and their caregivers. Studies have shown that patients undergoing hemodialysis often experience poor quality of life, with significant physical, psychological, and social challenges. Psychological well-being is an important component of overall health, encompassing emotional, mental, and social functioning. Impaired psychological well-being can negatively influence treatment adherence, increase the risk of complications, and adversely affect health outcomes. Therefore, interventions such as group therapy may play a crucial role in improving psychological well-being among patients undergoing hemodialysis.



**Conceptual Framework:-**

The present study is based on a modified conceptual framework derived from the General System Theory. According to this approach, the patient undergoing hemodialysis is considered as an open system that interacts with internal and external environments. The input includes demographic variables such as age, gender, type of work, dietary pattern, family history of renal disease, comorbid conditions, personal habits, and BMI. The throughput process involves the intervention, namely group therapy, which facilitates interaction, emotional support, and coping mechanisms among patients. The output is reflected in the level of psychological well-being among patients undergoing hemodialysis. Feedback is obtained through pretest and posttest assessment, which helps in evaluating the effectiveness of the intervention. This framework emphasizes that appropriate therapeutic interventions can positively influence the psychological well-being of patients.

### Material and Methods:-

A quantitative research approach with a quasi-experimental pretest–posttest control group design was adopted to assess the effectiveness of group therapy on psychological well-being among patients undergoing hemodialysis. The study was conducted at Sree Abirami Hospital, Coimbatore. Formal permission was obtained from the hospital authorities prior to data collection. A total of 60 patients undergoing hemodialysis were selected using a purposive sampling technique based on the inclusion criteria. The study was conducted after obtaining approval from the hospital ethical committee and the research committee of Sree Abirami College of Nursing. The nature and purpose of the study were explained to the participants, and informed written consent was obtained prior to data collection. Data were collected over a period of four weeks using a modified structured interview questionnaire consisting of two sections: demographic variables and items related to hemodialysis and psychological well-being. The content validity of the instrument was established by five experts, including three nursing experts and two medical experts in the field of psychiatry. The reliability of the tool was established using the test–retest method, and the reliability coefficient was found to be  $r = 0.82$ , indicating good reliability. After obtaining consent, a pretest was conducted using the questionnaire. Group therapy was administered to the experimental group on the same day using flashcards as an intervention. The posttest was conducted on the 15th day using the same questionnaire to evaluate the effectiveness of the intervention. The collected data were analyzed using both descriptive and inferential statistics. Frequency, percentage, mean, and standard deviation were used for descriptive analysis. Paired and unpaired t-tests were applied to determine the effectiveness of group therapy, and the chi-square test was used to assess the association between pretest scores and selected demographic variables. A p value of less than 0.05 was considered statistically significant.

### Results:-

#### Demographic Characteristics:

S.NO	DEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		GROUP THERAPY	
		N	%	N	%
1.	AGE				
	a. 31-40 years	1	3.3%	0	0%
	b. 41-50 years	8	26.7%	5	16.7%
	c. 51-60 years	16	53.3%	16	53.3%
	d. 61 years above	5	16.7%	9	30%
2.	GENDER				
	a. Male	20	66.7%	23	76.7%
	b. female	10	33.3%	7	23.3%
3.	TYPE OF WORK				
	a. Sedentary work	14	46.6%	8	26.7%
	b. Moderate work	8	26.7%	10	33.3%
	c. Heavy work	8	26.7%	12	40%
4.	DIETARY PATTERN				
	a. Vegetarian	3	10%	4	13.3%
	b. Non-vegetarian	27	90%	26	86.7%
5.	FAMILY H/O RENAL DISEASE				
	a. Yes	11	36.7%	8	26.7%
	b. No	19	63.3%	22	73.3%

S.NO	DEMOGRAPHIC VARIABLES	EXPERIMENTAL GROUP		GROUP THERAPY	
		N	%	N	%
1.	AGE				
	e. 31-40 years	1	3.3%	0	0%
	f. 41-50 years	8	26.7%	5	16.7%
		16	53.3%	16	53.3%

	g. 51-60 years h. 61 years above	5	16.7%	9	30%
2.	GENDER c. Male d. female	20 10	66.7% 33.3%	23 7	76.7% 23.3%
3.	TYPE OF WORK d. Sedentary work e. Moderate work f. Heavy work	14 8 8	46.6% 26.7% 26.7%	8 10 12	26.7% 33.3% 40%
4.	DIETARY PATTERN c. Vegetarian d. Non-vegetarian	3 27	10% 90%	4 26	13.3% 86.7%
5.	FAMILY H/O RENAL DISEASE c. Yes d. No	11 19	36.7% 63.3%	8 22	26.7% 73.3%

**Distribution of patients undergoing Hemodialysis according to their level of psychological wellbeing in experimental and control group.**

LEVELS	EXPERIMENTAL GROUP				CONTROL GROUP			
	PRETEST		POST TEST		PRETEST		POST TEST	
	N	%	N	%	N	%	N	%
INADEQUATE	28	93.3%	0	0%	26	86.7%	25	83.3%
MODERATE	2	6.7%	0	0%	4	13.3%	5	16.7%
ADEQUATE	0	0%	30	100%	0	0%	0	0%

**Table 2:** Depicts the level of psychological wellbeing among the patients undergoing Hemodialysis, in experimental group the findings revealed that in pretest, 28 (93.3%) sample had inadequate, 2 (6.7%) sample had moderate and 0% samples had adequate, whereas in posttest 0 (0%) samples had inadequate and moderate, 30 (100%) samples reported as adequate. Among control group 26 (86.7%) sample had inadequate, 4 (13.3%) had moderate, 0 (0%) sample had adequate, whereas in posttest 25 (83.3%) Samples had inadequate, 5 (16.7%) samples had moderate and 0 (0%) Samples had adequate.

#### EFFECTIVENESS OF GROUP THERAPY ON PSYCHOLOGICAL WELLBEING AMONG PATIENTS UNDERGOING HEMODIALYSIS IN EXPERIMENTAL GROUP

**Paired 't' test value of pre and Post-test level of psychological wellbeing among experimental group.**

LEVEL	TEST	MEAN	SD	PAIRED 't' VALUE	df
EXPERIMENTAL GROUP	PRE TEST	6.2	2.23	15.12	29
	POST TEST	24.5	1.96		

**N=60**

**Table:3 a.** shows that paired 't' test value which was collected to analyze the effectiveness of group therapy on psychological wellbeing among experimental group. The calculated 't' value 15.12 was significantly higher than the table value 2.05 at  $P < 0.05$ . This shows that group therapy was effective to improve the level of psychological wellbeing among patients undergoing hemodialysis Hence the hypothesis H1 was retained.

## EFFECTIVENESS OF GROUP THERAPY ON PSYCHOLOGICAL WELLBEING AMONG PATIENTS UNDERGOING HEMODIALYSIS EXPERIMENTAL AND CONTROL GROUP

Unpaired 't' test value of post-test to level of psychological wellbeing in experimental and control group.

LEVELS	TEST	MEAN	SD	UNPAIRED TEST	't'	df
EXPERIMENTAL GROUP	POST TEST	24.5	1.96	30.70		58
CONTROL GROUP	POST TEST	7	2.45			

N=60

**Table 4 a.** shows that unpaired 't' test value which was calculator to analyze the effectiveness of group therapy on psychological wellbeing among experimental and control group. The calculated unpaired 't' value 30.70 was significantly higher than the table value 2.05 value  $P < 0.05$ . This result shows that group therapy was effective to improve level of psychological wellbeing among patients undergoing hemodialysis. Hence the hypothesis H2 was retained.

## ASSOCIATION BETWEEN THE LEVEL OF PSYCHOLOGICAL WELLBEING AND THEIR SELECTED IN DEMOGRAPHIC VARIABLES.

S.NO	VARIABLES	EXPERIMENTAL GROUP	CONTROL GROUP	df	TABLE VALUE
1.	AGE	0	0	6	12.59
2.	GENDER	0	0	2	5.99
3.	TYPE OF WORK	0	0	4	9.49
4.	DIETARY PATTERN	0	0	2	5.99
5.	FAMILY H/O RENAL DISEASE	0	0	2	5.99
6.	COMORBID CONDITION	0	0	8	15.51
7.	PERSONAL HABITS	0	0	8	15.51
8.	BMI	0	0	6	12.59

**Table 5.** In this table, all chi-square values were found to be zero, indicating that there was no significant association between the level of psychological well-being and the selected demographic variables in both experimental and control groups. This may be due to the similarity in characteristics of the participants and limited variation in responses. Hence, the hypothesis (H3) was rejected.

## Discussion:-

The findings of the present study demonstrated that group therapy was highly effective in improving psychological well-being among patients undergoing hemodialysis. In the experimental group, the majority of participants had inadequate psychological well-being in the pretest, whereas all participants showed adequate levels in the posttest following the intervention. In contrast, the control group showed minimal improvement, indicating that routine care alone was not sufficient to enhance psychological well-being. These findings are consistent with previous studies, which have reported that structured group interventions significantly improve psychological outcomes among patients with chronic illnesses, including those undergoing hemodialysis. Similar studies have shown that group therapy promotes emotional expression, peer support, and coping strategies, thereby reducing anxiety, depression, and psychological distress. The improvement observed in the experimental group may be attributed to the supportive environment created during group sessions, where patients were able to share experiences and develop better coping mechanisms. The significant increase in mean posttest scores in the experimental group compared to the control group further supports the effectiveness of the intervention. The low standard deviation also indicates consistency in the improvement among participants. The absence of association between psychological well-being and demographic variables suggests that the effectiveness of group therapy is independent of factors such as age, gender, and other characteristics.

**Conclusion:-**

The present study assessed the effectiveness of group therapy on psychological well-being among patients undergoing hemodialysis, and the findings revealed that group therapy was effective in improving psychological well-being with statistically significant results at  $p < 0.05$ . However, the study had certain limitations, including a small sample size, use of purposive sampling, short duration, and restriction to a single setting, which may limit the generalizability of the findings. Despite these limitations, the study concludes that group therapy is an effective intervention for enhancing psychological well-being among patients undergoing hemodialysis.

**References:-**

1. Bakhsh AM, Mahallawi WH. Psychological effects of hemodialysis on patients with renal failure: A cross-sectional study. *J Clin Med.* 2025;14(20):7136.
2. Yan S, Zhu X, Huo Z, Wang Z, Cui H. Psychological intervention for depression and anxiety in hemodialysis patients: A meta-analysis. *Actas Esp Psiquiatr.* 2025;53(1):154–164.
3. Liu J, Liu J, Wang R, Ng MSN, Wu X, Chen J. Positive living with dialysis: Effect of a positive psychology intervention in hemodialysis patients. *Appl Psychol Health Well Being.* 2025;17(5):e70078.
4. Saedi F, Dehghan M, Mohammadrafie N, et al. Predictive role of spiritual health, resilience, and mental well-being in treatment adherence among hemodialysis patients. *BMC Nephrol.* 2024;25:326.
5. Ćwiek A. Pharmacological and psychological treatment of depression and anxiety among hemodialyzed patients: A review. *Postepy Psychiatr Neurol.* 2024;33(2):98–102.
6. Aqeel SA, Muhe-Aldeen AL. Psychological aspects among patients receiving hemodialysis. *Int J Adv Psychiatr Nurs.* 2025;7(1):125–132.
7. Villarroel MA, Wang X. Mental health symptoms and care among adults with kidney disease. *Prev Chronic Dis.* 2025;22:240509.
8. Diao K, Wang J, Huang Y, et al. Experience of social isolation in patients receiving dialysis: A qualitative study. *BMC Psychol.* 2025;13:947.
9. Zhang L, Zou L, Zhou L. Effectiveness of psychoeducational interventions on psychological distress and health-related quality of life among patients with maintenance hemodialysis: A systematic review and meta-analysis. *Int J Nephrol Renovasc Dis.* 2024;46(1):2331613.
10. Saedi F, Dehghan M, Mohammadrafie N, Xu X, Hermis AH, Zakeri MA. Predictive role of spiritual health, resilience, and mental well-being in treatment adherence among hemodialysis patients. *BMC Nephrol.* 2024;25:326.
11. Bulathwatta DT, Borchet J, Rudnik A, Bidzan M. Psychosocial well-being among individuals with chronic kidney disease undergoing hemodialysis treatment and their caregivers. *Front Psychol.* 2023;14:1194991.
12. Ćwiek A. Pharmacological and psychological treatment of depression and anxiety among hemodialyzed patients: A review. *Postepy Psychiatr Neurol.* 2024;33(2):98–102.
13. Alishahi M, Mazloum SR, Mohajer S, et al. Effect of recreational therapy on fatigue in hemodialysis patients: A randomized clinical trial. *BMC Nephrol.* 2024;25:368.