

Effect of Peer-Led Intervention on Hope and Self-Management of Patients on Haemodialysis

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ABSTRACT

Introduction: Haemodialysis patients frequently experience psychosocial distress due to the chronic nature of their illness, which may result in diminished hope and inadequate self-management. Peer-led interventions, wherein trained peers provide emotional, informational, and practical support, have the potential to improve these outcomes. This study aimed to evaluate the effectiveness of a peer-led intervention on hope and self-management among patients undergoing haemodialysis.

Materials and Methods: A pre-experimental one-group pretest-posttest design was used in a selected hospital in Ernakulam. Sixty haemodialysis patients were selected using non-probability convenience sampling and were divided into five groups led by trained peer leaders. The intervention included mindfulness-based activities and structured self-management strategies. Hope and self-management were assessed before and after the intervention using a Demographic Proforma, the Adult Hope Scale, and the Haemodialysis Self-Management Instrument-18. Data were analyzed using descriptive and inferential statistics with SPSS version 20 at a 0.05 level of significance.

Results: Pretest findings showed that 86.7% of participants had moderate hope and 13.3% had low hope, with no participants reporting high hope. Self-management levels were moderate in 60.0%, high in 38.3%, and low in 1.7%. Post-intervention, 78.3% demonstrated moderate hope and 21.7% high hope. Self-management improved markedly, with 96.7% achieving high and 3.3% moderate levels. Significant improvements were observed in hope ($t = 4.34$, $p = 0.02$) and self-management ($t = 17.32$, $p = 0.00$). Educational status was significantly associated with both variables.

Conclusion: The peer-led intervention significantly enhanced hope and self-management among haemodialysis patients, supporting its integration into routine dialysis care

Key words: peer-led intervention, hope, self-management, patients on haemodialysis.

INTRODUCTION

The kidneys are two bean-shaped organs responsible for filtering blood, removing waste products, and regulating fluid balance through urine production. Chronic kidney disease (CKD), also known as chronic kidney failure, is characterized by a gradual decline in kidney function, leading to the

accumulation of fluids, electrolytes, and metabolic wastes in the body.¹ Early stages of CKD often remain asymptomatic, whereas advanced stages present with more evident clinical manifestations. Management focuses on slowing disease progression by addressing underlying causes; however, kidney function may continue to deteriorate even with optimal treatment. Ultimately, CKD can progress to end-stage kidney failure, a life-threatening condition requiring dialysis or kidney transplantation for survival.

Haemodialysis (HD) plays a crucial role in managing kidney failure by removing excess fluid and solutes from the blood while maintaining electrolyte balance, including potassium, sodium, and calcium.¹ Although HD enhances patient well-being and prolongs life, it does not cure kidney failure. Instead, it supports physiological stability in patients with acute kidney injury or CKD, serving either as a temporary therapy until recovery or transplantation, or as lifelong treatment for those who are not transplant candidates. Kidney failure remains a major global health concern, contributing substantially to morbidity and mortality, with millions of deaths occurring annually due to limited access to affordable renal replacement therapies.³

Globally, CKD has emerged as a significant public health issue. The Global Burden of Disease (GBD) study reports that by 2020, CKD affected approximately 10% of the world's population.^{3,4} Mortality associated with CKD increased by 41.5% between 1990 and 2017, positioning it among the leading causes of death worldwide. This burden varies across regions, cardiovascular complications dominate mortality patterns in high-income nations, whereas undiagnosed or untreated CKD contributes to higher death rates in low- and middle-income countries. In India, the prevalence of CKD rose by nearly 16.38% from 2011 to 2023.⁶ A systematic review (2000–2021) estimated an overall prevalence of 13.24% among individuals aged 15 years and older, with notably higher rates among those with

diabetes (31%) and hypertension (27%). Findings from the Indian Chronic Kidney Disease Study further indicate increasing mortality linked to CKD.⁵

As CKD advances to End Stage Renal Disease requiring HD, psychosocial factors such as hope become vital in determining patient outcomes. Hope is conceptualized as a multidimensional and dynamic construct that supports adaptation to chronic illness.⁵ It involves cognitive processes such as goal setting, identifying pathways, and initiating actions, all of which help patients cope with the demands of long-term treatment and overcome adversity.⁷

Self-management, likewise, is central to the ongoing care of HD patients. It refers to the patient's active involvement in maintaining their health, preventing complications, managing symptoms, and minimizing the impact of the disease on everyday life.⁷ This process requires collaboration with healthcare professionals and encompasses disease management, decision-making, problem-solving, goal setting, and continuous symptom monitoring. Enhancing self-management among HD patients has been shown to reduce morbidity and mortality while improving overall quality of life. Interventions such as education, counselling, structured self-management programs, self-efficacy training, self-monitoring, and social support are commonly employed to strengthen these skills.^{7,8}

In this context, peer-led interventions have gained attention for their ability to deliver informational, emotional, instrumental, and spiritual support from experienced or fellow patients who have successfully managed their condition. Such support can foster positive motivation and enhance hope among patients. While peer programs in HD settings have generally targeted psychological outcomes, they have typically been delivered by healthcare professionals.^{8,9} However, health workers may not fully understand the lived experiences of HD patients, including their emotional challenges and self-management needs.¹⁰

Therefore, it is important to investigate how peer-led programs influence both hope and self-management among individuals on dialysis. Understanding the mechanisms through which peer support promotes self-management is essential for assessing its overall impact in HD populations. ²

Objectives of the study

1. To assess the hope of patients on haemodialysis at pre- test level.
2. To determine the self-management of patients on haemodialysis at pre- test level
3. To assess the hope of patients on haemodialysis at posttest level.
4. To determine the self-management of patients on haemodialysis at posttest level.
5. To determine the effect of peer led intervention on hope and self-management of patients on haemodialysis.
6. To find the association of research variables with selected sample variables of patients on haemodialysis.

Hypotheses

The following hypotheses will be tested at 0.05 level of significance:

H1-There is a significant difference between mean pretest and posttest score of hope among patients on haemodialysis

H2-There is a significant difference between mean pretest and posttest score of self- management among patients on haemodialysis

H3-There is a significant association between research variables and selected sample variables of patients on haemodialysis.

MATERIALS & METHODS

Research approach: Quantitative research

Research design: Pre experimental one group pretest-posttest design

Study setting: Selected nursing colleges in Ernakulam

Study population: All the patients on haemodialysis in selected hospital Ernakulam district.

Sample size

Sample size calculation has been carried out based on the study conducted by Nilofar Pasyar Masoume Rambod, Mostafa Jowkar on the effect of peer support on hope among patients under haemodialysis.

To calculate the sample size, the researcher used the following formula.

$$(Z_{\alpha/2} + Z_{\beta})^2 \times (SD)^2 / d^2$$

$$Z_{\alpha/2} = 1.96$$

$$Z_{\beta} = 0.84$$

$$d = 1.74$$

$$SD = 4.37$$

$$(1.96 + 0.84)^2 \times (4.37)^2 / (1.74)^2 = 49.44$$

Proposed sample size for the present study was 60.

Sampling method: Non probability Convenience sampling technique.

Intervention: Peer led intervention

Duration of intervention: one hour

Inclusion criteria

a) Inclusion criteria (Peer)

Patients who are,

- on maintenance haemodialysis twice or thrice in a week at least for a
- duration of six months.
- obtained hope score >70 based on Adult Hope Scale and Haemodialysis
- Self-Management Instrument-18 score >50
- has effective communication skills.
- has at least higher secondary education.
- patients who were willing to provide peer led intervention.

b) Inclusion criteria (Patients on haemodialysis)

Patients who are,

- among the age group of 18 years and above.
- on maintenance haemodialysis twice or thrice in a week
- on haemodialysis for at least six months.
- possessing a mobile phone of their own or by any family member

Exclusion criteria

a) Exclusion criteria (Peer)

Patients who have,

- severe cognitive dysfunction.
- reported hearing problems.
- history of emotional traumas such as death of their loved ones and divorce in the past six months.

b) Exclusion criteria (Patients on haemodialysis)

Patients who have,

- severe cognitive dysfunction.
- history of renal transplantation.
- severe cardio vascular and cerebro-vascular disease.
- reported hearing problems.
- history of emotional traumas such as death of their loved ones and divorce in the past six months.

Intervention

The peer-led intervention implemented in this study was a structured and systematically organized program designed to improve hope and self-management among patients undergoing haemodialysis. This was a structured program delivered by trained haemodialysis patients (peer leaders) to enhance hope and self-management among participants. The intervention consisted of two components: self-management strategies and mindfulness-based meditation, each delivered for 30 minutes through a webinar.

The self-management component focused on improving patients' ability to manage their condition through adherence to treatment, dietary and fluid restrictions, symptom monitoring, and problem-solving skills. Peer leaders also shared personal experiences to promote understanding and confidence in self-care practices.

The mindfulness-based component included simple techniques such as focused breathing and present-moment awareness to reduce stress and improve emotional well-being. Participants were encouraged to practice daily and maintain a mindfulness calendar.

Continuous follow-up through WhatsApp and phone calls reinforced adherence and provided ongoing support.

Data collection process

The present study was conducted over a period from 2nd December 2024 to 31st December 2024 at Lourdes Hospital, Ernakulam, after obtaining formal administrative permission from the concerned authority. A total of 60 haemodialysis patients who met the inclusion and exclusion criteria were selected using a non-probability convenience sampling technique. Prior to data collection, informed consent was obtained from all participants, and a participant information sheet was provided explaining the purpose and procedure of the study.

Initially, the investigator introduced herself to the participants, established rapport, and explained the study in detail. The participants were then divided into five groups, each consisting of 12 haemodialysis patients. The data collection procedure was carried out in four sequential sessions.

First session

During the first session, baseline data were collected from all participants using a structured interview method. The pretest was conducted using Tool-1, Tool-2, and Tool-3, which required approximately 2 minutes, 5 minutes, and 5 minutes respectively.

Second session

In the second session, the scores obtained from Tool-2 and Tool-3 were analyzed to identify suitable peer leaders. Based on the predefined inclusion and exclusion criteria, five peer leaders were selected, one for each group.

Third session

The third session involved training of the selected peer leaders by the investigator. A structured teaching programme was provided, which included education on self-

management strategies for 30 minutes followed by mindfulness-based training for another 30 minutes, making a total duration of one hour. After the training, five WhatsApp groups were created, and each group included one peer leader along with 12 participants to facilitate communication and follow-up.

Fourth session

In the fourth session, peer-led interventions were implemented through a pre-scheduled webinar for each group. The intervention included education on self-management strategies for 30 minutes and mindfulness-based intervention for 30 minutes. Following the intervention, continuous follow-up was maintained by the investigator through phone calls and WhatsApp messages to ensure adherence. Participants were also instructed to maintain a structured calendar to record their daily mindfulness meditation practice.

The effectiveness of the intervention was assessed by conducting a posttest on the seventh day using the same tools that were used during the pretest.

Outcome measures

Tool 1: Demographic proforma

Tool 2: Adult hope scale

Tool-3: Haemodialysis self-management instrument-18

Statistical Analysis

The data was analyzed by employing both descriptive and inferential statistics in accordance with the study's objectives and hypotheses using SPSS version 20. Paired t-test was employed to evaluate the effect of peer led intervention on hope and self-management of patients on haemodialysis

RESULT

Description of sample characteristics

Table 1: Frequency and percentage distribution of sample based on age and gender.
(n=60)

Variables	Category	Frequency (f)	Percentage(%)
Age in years	Less than 50	9	15.0
	51-60	24	40.0
	61 and above	27	45.0
Gender	Male	39	65.0
	Female	21	35.0

Table 1 represents that in this study among the 60 haemodialysis patients, 45.0% patients are in the age group above 60 years, 40.0% are in the age group of 51 to 60 years

and 15.0% are less than 50 years. With regard to the gender 65.0% are males and 35.0% are females.

(n=60)

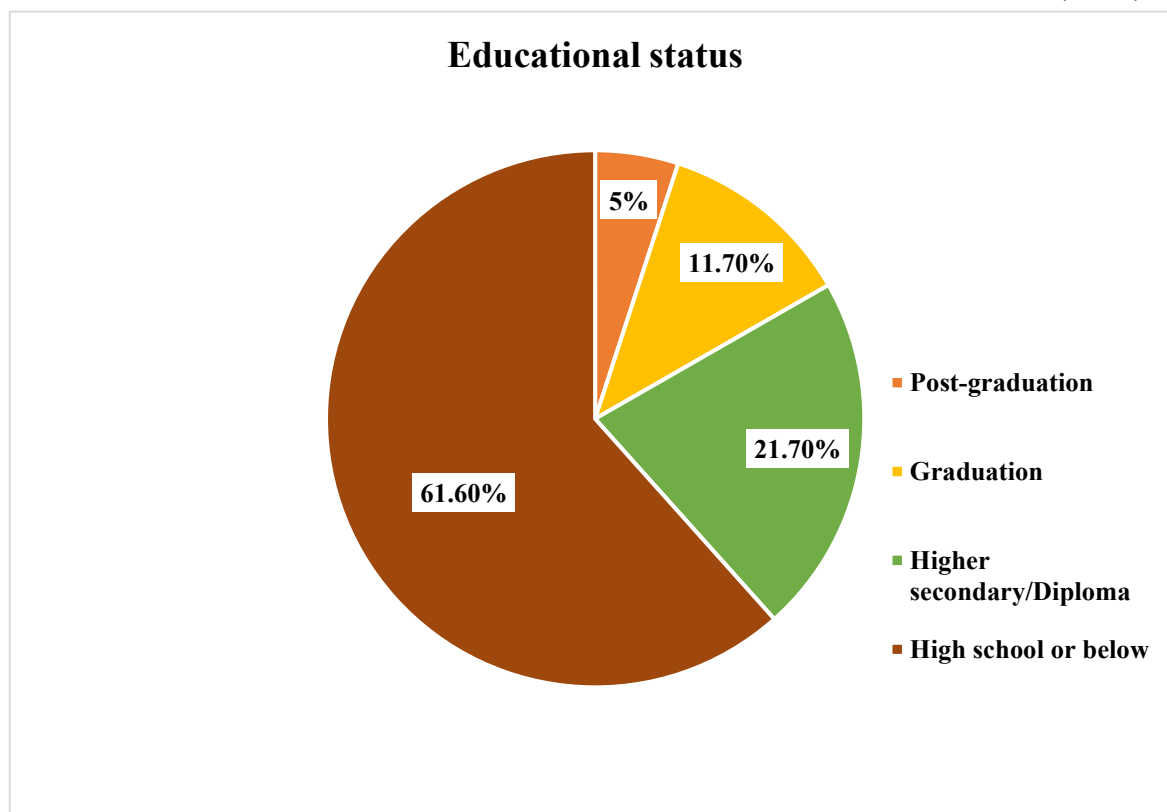


Figure 1: Percentage distribution of sample based on educational status.

Figure 1 shows that based on the educational status 61.6% have high school and below education, 21.7% have higher

secondary or diploma, 11.7% are graduates and 5% are post-graduates.

(n=60)

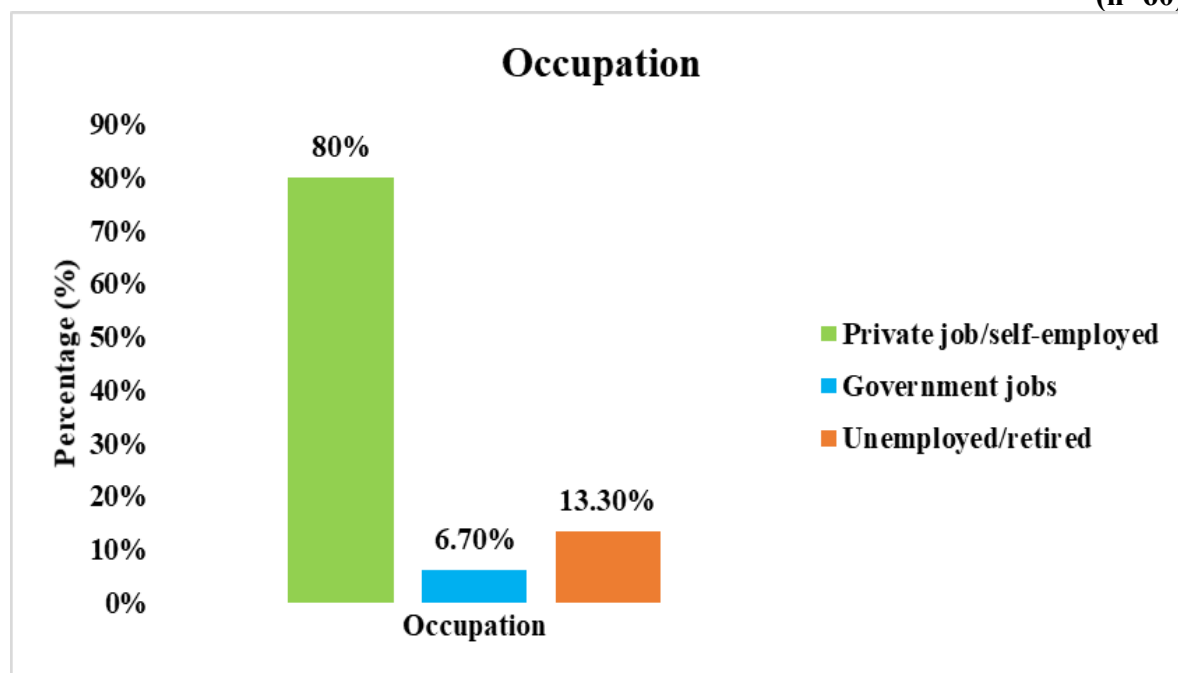


Figure 2: Percentage distribution of sample based on occupation

Figure 2 represents that based on the occupational status 80% have private job/self-employed, 13.3% are unemployed or retired and 6.7% have government jobs.

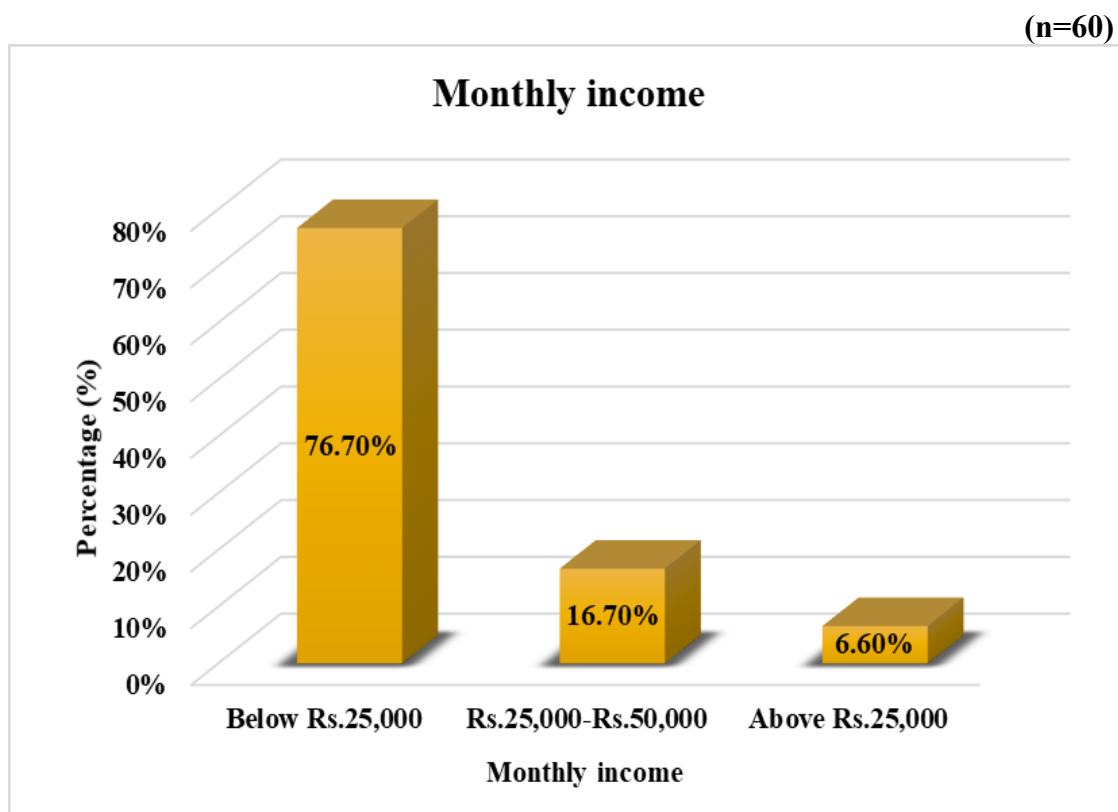


Figure 3: Percentage distribution of sample based on monthly income

Figure 3 illustrates that based on the monthly income 76.70% have monthly income below Rs. 25,000 whereas 16.70% have monthly income at the range of Rs. 25,000 to 50,000 and 6.6% have above Rs. 50,000 as monthly incomes.

Table 2: Frequency and percentage distribution of sample based on number of years on haemodialysis, duration of haemodialysis and number of haemodialysis per week. (n=60)

Variables	Category	Frequency (f)	Percentage (%)
Number of years on haemodialysis	<1 Year	19	31.7
	>1 Year	41	68.3
Duration of haemodialysis	3-4 Hours	46	76.7
	5-6 Hours	14	23.3
Number of haemodialysis per week	2times a week	37	61.7
	3times a week	23	38.3

Table 2 highlights that with regard to number of years on haemodialysis 68.3% are undergoing haemodialysis for more than 1 year and 31.7% are undergoing haemodialysis less than 1 year. On the basis of duration of haemodialysis 76.7% have 3-4hours session and 23.3% have 5-6 hours of haemodialysis session. Considering the

number of haemodialysis per week about 61.7% have 2 times a week haemodialysis session and 38.3% have 3 times a week session of haemodialysis.

Objective 1: To assess the hope of patients on haemodialysis at pretest level.

Table 3: Frequency, percentage, mean and SD of the level of hope among sample based on total scores at pretest level. (n=60)

Variable	Category	Frequency (f)	Percentage (%)	Mean	SD
Hope	Low hope	0	0	64.92	6.69
	Moderate hope	52	86.7		
	High hope	8	13.3		

Table 3 presents the frequency, percentage, mean and SD of the level of hope level based on total score. It indicates that about

86.7% have moderate hope and the rest 13.3% have high hope level. The total mean pretest score of hope is (64.97±6.69).

Table 4: Frequency, percentage, mean and SD of the level of hope among sample based on subscale scores at pretest level. (n=60)

Variable	Subscales	Hope			Mean	SD
		Low f (%)	Moderate f (%)	High f (%)		
Hope	Agency	0	36(60.0)	24(40.0)	23.78	3.03
	Pathway	2(3.3)	50(83.3)	8(13.3)	21.02	3.34
	Positive emotion	5(8.3)	52(86.7)	3(5.0)	20.12	2.38

Table 4 demonstrates that in the pretest of hope subscales it indicates 60.0% have moderate agency level and 40.0% have high agency level. Considering pathway subscale scores, majority 83.3% have moderate pathway level, 13.3% have high pathway level and 3.3% have low pathway level. On the basis of positive emotion subscale scores, 86.7% have moderate positive emotion level, 8.3% have low positive

emotion subscales, and 5.0% have high positive emotion level. The total mean pretest subscale scores of hope including agency subscale is (23.78±3.03), pathway subscale is (21.02±3.34) and positive emotion subscale is (20.12±2.38).

Objective 2: To determine the self-management of patients on haemodialysis at pretest level

Table 5: Frequency, percentage, mean and SD of the level of self-management among samples based on total scores at pretest level. (n=60)

Variable	Category	Frequency (f)	Percentage (%)	Mean	SD
Self-management	Low	1	1.7	53.19	5.51
	Moderate	36	60.0		
	High	23	38.3		

Table 5 displays the frequency, percentage, mean and SD of the level of self-management level based on total score. It indicates that about 60.0% have moderate self-management level, 38.3% have high

self-management level and 1.7% have low self-management level. The total mean pretest score of self-management is (53.19±5.51).

Table 6: Frequency, percentage, mean and SD of self-management level based on subscales scores of patients on haemodialysis at pretest level. (n=60)

Variable	Subscales	Self-management			Mean	SD
		Low f (%)	Moderate f (%)	High f (%)		
Self-management	Partnership	0	25(41.7)	35(58.3)	12.64	1.42
	Self-care	1(1.6)	49(81.7)	10(16.7)	16.73	1.68
	Problem solving	2(3.4)	32(53.3)	26(43.3)	14.95	2.25
	Emotional management	2(3.4)	32(53.3)	26(43.3)	9.15	1.52

Table 6 represents that in pretest of self-management subscales it indicates that 58.3% have high partnership level, 41.7% have moderate partnership level. Considering self-care subscale scores, 81.7% have moderate self-care level, 16.7% have high self-care level. On the basis of problem solving subscale scores, 53.3% have moderate problem-solving level, 43.3% have high problem-solving level and 3.4% have low problem-solving ability. On the basis of emotional management subscale

53.3% have moderate emotional management level, 43.3% have high emotional management level and 3.4% have low emotional management level. The total mean pretest score of the self-management subscales including partnership subscales is (12.64 ± 1.42) , self-care is (16.73 ± 1.68) , problem solving is (14.95 ± 2.25) and emotional management is (9.15 ± 1.52) .

Objective 3: To assess the hope of patients on haemodialysis at posttest level.

Table 7: Frequency, percentage, mean and SD of the level of hope based on total scores of haemodialysis patients at posttest level. (n= 60)

Variable	Category	Frequency (f)	Percentage (%)	Mean	SD
Hope	Moderate hope	47	78.3	66.98	6.17
	High hope	13	21.7		

According to Table 7 the frequency, percentage, mean and SD of the hope level based on total score at the post test level indicates that about 78.3% have moderate

hope and 21.7% have high hope level. The total mean posttest score of the hope is (66.98 ± 6.17) .

Table 8: Frequency, percentage, mean and SD of the level of hope based on subscale scores of sample at posttest level. (n=60)

Variable	Subscales	Hope			Mean	SD
		Low f (%)	Moderate f (%)	High f (%)		
Hope	Agency	0	29(48.3)	31(51.7)	24.39	2.82
	Pathway	3(5.0)	46(76.7)	11(18.3)	21.75	3.13
	Positive emotions	4(6.6)	49(81.7)	7(11.7)	20.85	2.35

Table 8 provides the frequency, percentage, mean and SD distribution of the hope level based on its subscale scores at posttest level. It indicates that on the basis of agency subscale scores 51.7% have high agency level, 48.3% have moderate agency level. While considering pathway subscale scores, 76.7% have moderate pathway level, 18.3% have high pathway level and 5.0% have low pathway level. On the basis of positive emotion subscale scores, 81.7% have

moderate positive emotion level, 11.7% have high positive emotion level, and 6.6% have low positive emotion level. The total posttest score of the subscales of hope including agency subscale is (24.39 ± 2.82) , pathway subscale is (21.75 ± 3.13) and positive emotions is (20.85 ± 2.35) .

Objective 4: To assess the self-management of patients on haemodialysis at posttest level.

Table 9: Frequency, percentage, mean and SD of self-management level based on total scores of samples at posttest level. (n=60)

Variable	Category	Frequency (f)	Percentage (%)	Mean	SD
Self-management	Moderate	2	3.3	61.37	2.72
	High	58	96.7		

Table 9 summarizes the self-management level of posttest based on total score. It

indicates that 96.7% have high self-management level and 3.3% have moderate

self-management level. The total mean (61.37±2.72).
posttest score of self-management is

Table 10: Frequency, percentage, mean and SD of self-management level based on subscales scores of samples at posttest level. (n=60)

Variable	Subscales	Self-management		Mean	SD
		Moderate f (%)	High f (%)		
Self-management	Partnership	5(8.3)	55(91.7)	14.15	1.03
	Self-care	8(13.3)	52(86.7)	19.85	1.27
	Problem solving	3(5.0)	57(95.0)	17.20	1.27
	Emotional management	13(21.7)	47(78.3)	10.17	0.87

Table 10 shows the posttest level the self-management based on its subscale scores. With regard to the partnership subscale scores 91.7% have high partnership level and 8.3% have moderate partnership level. While considering self-care subscale scores, 86.7% have high self-care level and 13.3% have moderate self-care level. On the basis of problem-solving subscale scores, 95.0% have high problem-solving level and 5.0% have moderate problem-solving level. With regard to the emotional management subscale 78.3% have high emotional

management level and 21.7% have moderate emotional management level. The total mean post test score of subscales of self-management including partnership subscale is (14.15±1.03), self-care subscale is (19.85±1.27), problem solving is (17.20±1.27) and emotional management is (10.17±0.87).

Objective 5: To determine the effect of peer led intervention on hope and self-management of patients on haemodialysis

Table 11: Mean, standard deviation and 't' value of pretest and posttest score of hope of patients on haemodialysis. (n=60)

Hope	Mean	SD	Mean difference	df	't' value	p value
Pretest	64.92	6.69	2.06	59	4.34	0.00*
Posttest	66.98	2.72				

*significant at 0.01 level

Table 11 denotes the mean pretest, posttest score and effect of peer led intervention of hope among haemodialysis patient. The mean posttest score of hope (66.98±2.72) is higher than the mean pretest score (64.92±6.69) of hope and the t value is 4.34.

Since, the p value is 0.00 and is statistically significant at 0.05 level, the null hypothesis (H_{01}) is rejected. It is interpreted as there is significant effect of peer led intervention on hope of the patients on haemodialysis.

Table 12: Mean, standard deviation and 't' value of pretest and posttest score of self-management of patients on haemodialysis. (n=60)

Self-management	Mean	SD	Mean difference	df	't' value	p value
Pretest	53.19	5.51	8.18	59	17.32	0.00*
Posttest	61.37	2.72				

*significant at 0.01 level

Table 12 explains the mean pretest, posttest score and effect of peer led intervention of self-management among haemodialysis

patient. The mean posttest score of self-management (61.37±2.72) is higher than the mean pretest score (53.19±5.51) of self-

management and the t value is 17.32. Since, the p value is 0.00 and is statistically significant at 0.05 level, the null hypothesis (H_0) is rejected. It is interpreted as there is significant effect of peer led intervention on

self-management of the patients on haemodialysis.

Objective 6: To find the association of research variables with selected sample variables of patients on haemodialysis.

Table 13: Association of hope with educational status of patients on haemodialysis. (n=60)

Variables	Category	Hope		Fisher's exact value	p value
		Moderate	High		
Educational status	Post-graduation	1	2	9.16	0.01*
	Graduation	5	2		
	Higher secondary/diploma	11	2		
	High school or below	35	2		

*significant at 0.01 level

Table 13 presents the association between pretest hope scores and selected variables using Fisher's exact test. A significant association was observed between hope and educational status (9.16, $p = 0.01$). No significant associations were found with age

(3.44, $p = 0.16$), gender (0.91, $p = 0.43$), occupation (1.15, $p = 0.77$), monthly income (2.71, $p = 0.20$), years on haemodialysis (1.57, $p = 0.41$), duration of haemodialysis (0.60, $p = 0.67$), or frequency of haemodialysis (0.69, $p = 0.70$).

Table 14: Association of self-management with educational status of patients on haemodialysis. (n=60)

Variables	Category	Self-management			Fisher's exact value	p value
		Low	Moderate	High		
Educational status	Post-graduation	0	0	3	18.51	0.00*
	Graduation	0	2	5		
	Higher secondary/diploma	0	5	8		
	High school or below	1	29	7		

*significant at 0.01 level

Table 14 presents the association between pretest self-management scores and selected variables using Fisher's exact test. A significant association was found between self-management and educational status (18.51, $p = 0.00$). No significant associations were observed with age (2.01, $p = 0.91$), gender (0.71, $p = 0.86$), occupation ($\chi^2 = 2.18$, $p = 1.00$), monthly income (4.02, $p = 0.55$), years on haemodialysis (1.10, $p = 0.70$), duration of haemodialysis (3.21, $p = 0.17$), or frequency of haemodialysis (2.27, $p = 0.27$).

DISCUSSION

The findings of the study were supported by an experimental study conducted by Pasya N et al. on the effect of peer support on hope among patients under haemodialysis among 128 patients categorized under

interventional and control groups. The result showed the total mean pretest score of hope was (62.03 ± 4.37) for interventional group and (62.40 ± 6.13) for control group.²

The present study result was inconsistent with a quasi-experimental study conducted by Husain F et al.⁹ on effects of peer support program on self-management in patients with end-stage renal disease on haemodialysis among 33 patients in control group and 32 in intervention group. The result showed that the self-management at the pretest level in intervention group (79.47 ± 7.919) was low as compared to the control group (81.88 ± 8.291) scores.

The result of the study was supported by an experimental study conducted by Mailani F et al. to assess the self-management and relating factors among chronic kidney disease patients on haemodialysis. The

result of the study showed that there was a significant association of self-management with education ($p=0.00$). There was no association of self-management with gender ($p=0.26$), marital status ($p=0.24$), history of being under haemodialysis ($p=0.76$) and cause of renal failure ($p=0.27$). In contrast there was a significant association of self-management with job ($p=0.02$) and monthly income ($p=0.00$).¹¹

The result of the study was in contrast with a cross-sectional study Jieun C et al. on factors related to hope and relationships between hope, physical symptoms, depressive mood and quality of life in young adult and prime-aged patients with haemodialysis. The result showed that self-management had a significant association with religion ($p=0.00$), occupation ($p=0.00$) monthly family income ($p=0.00$). There was no significant association of self-management with the educational status ($p=0.50$), gender ($p=0.73$), age ($p=0.60$), marital status ($p=0.13$), dialysis period ($p=0.56$), and primary diseases ($p=0.35$) of the patient.¹²

Recommendations

The present study can be used for future studies to bring clinical evidence and strengthen the outcome of the study. The recommendation for the future studies is:

- Similar studies can be conducted with a large sample size with control group to assess the effect of peer led intervention on hope and self-management in haemodialysis patients.
- Studies can be conducted to assess the effect of peer led intervention on hope among patients with other chronic illness.
- A comparative study can be conducted to assess the effect of peer led intervention verses cognitive behaviour therapy in improving hope and self-management of haemodialysis patients.
- Longitudinal studies can be conducted to assess the sustained impact of peer led intervention over time.

- Mixed method studies can be conducted to gain a deeper understanding of how peer led intervention influence hope among patients on haemodialysis combining both qualitative and quantitative approach to assess the peer led intervention on hope among haemodialysis patients.

Limitations

The present study was limited to the following:

- Generalization of the study result is limited due to small sample size and due
- to single setting.
- The actual effect of peer led intervention could not be assessed as there was no
- control group for comparison.
- The intervention was delivered through webinar rather than individual session
- as the participants were unwilling to attend multiple session after undergoing
- dialysis.
- Homogeneity of the result may have been affected by variations in individual
- teaching styles as the intervention was delivered by peers.

CONCLUSION

The present study evaluated the effect of peer-led intervention on both hope and the self-management of patients on haemodialysis. The findings indicated that the mean post test scores of both hope and self-management were significantly higher than the corresponding pretest scores, suggesting that peer led intervention was effective in enhancing these outcomes. Based on these results, the peer led intervention can be considered a valuable addition to nursing practice. The study also found significant association between hope and educational status of patients on haemodialysis. similarly, an association was observed between self-management and educational status, suggesting that education may play a key role in influencing both hope and self-management in haemodialysis patients.

Declaration by Authors

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REFERENCES

- Vaidya SR, Aeddula NR. Chronic kidney disease. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535404/>
- Pasyar N, Rambod M, Jowkar M. The effect of peer support on hope among patients under hemodialysis. *Int J Nephrol Renovasc Dis.* 2020; 13:37-44. doi:10.2147/IJNRD.S240756.
- GBD Chronic Kidney Disease Collaboration. Global, regional, and national burden of chronic kidney disease, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* 2020;395(10225):709-733. doi:10.1016/S0140-6736(20)30045-3.
- Jha V, Garcia-Garcia G, Iseki K, Li Z, Naicker S, Plattner B, et al. Chronic kidney disease: global dimension and perspectives. *Lancet.* 2013;382(9888):260-272. doi:10.1016/S0140-6736(13)60687-X.
- Parviniannasab AM, Dehghani F, Hosseini SA. The mediating role of hope in the relation between uncertainty and social support with self-management among patients with ESKD undergoing hemodialysis. *BMC Nephrol.* 2024; 25:129. doi:10.1186/s12882-024-03558-2.
- Bharati J, Jha V. Global dialysis perspective: India. *Kidney360.* 2020;1(10):1143-1147. doi:10.34067/KID.0003982020.
- Lorig KR, Holman H. Self-management education: history, definition, outcomes, and mechanisms. *Ann Behav Med.* 2003;26(1):1-7. doi:10.1207/S15324796ABM2601_01.
- Gong T, Wang H, Zhang Q, Ye Y. The effectiveness of peer support on self-management and psychosocial outcomes in maintenance hemodialysis patients: a systematic review and meta-analysis. *Hemodial Int.* 2026;30(2):329-342. doi:10.1111/hdi.70044.
- Husain F, Kusuma H, Johan A. Effects of peer support program on self-management in patients with end-stage renal disease undergoing hemodialysis. *Nurse Media J Nurs.* 2020;10(2):171-181. doi:10.14710/nmjn.v10i2.26502.
- Bağrıaçık E, Totur Dikmen B. Self-management training in patients with chronic kidney disease undergoing hemodialysis: a systematic review. *Semin Dial.* 2024;37(2):91-100. doi:10.1111/sdi.13164.
- Mailani F, Huriani E, Muthia R, Rahmiwati R. Self-management and relating factors among chronic kidney disease patients on hemodialysis: an Indonesian study. *Nurse Media J Nurs.* 2023;13(1):109-120. doi:10.14710/nmjn.v13i1.48708.
- Cha J, Yi M. The influence of cognitive coping on hope, depression and satisfaction with life in hemodialysis patients. *Korean J Adult Nurs.* 2013;25(4):389-399. doi:10.7475/kjan.2013.25.4.389.

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