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Motivational Interviewing to Improve Inherent and Social Dignities Among Patients Undergoing Hemodialysis

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Abstract

Background: *Motivational interviewing (MI) is a patient-centered counseling approach aimed at enhancing intrinsic motivation for behavior change by addressing ambivalence. While MI has shown promise in improving psychological and social outcomes in chronic illness, its impact on patient dignity remains underexplored. This study evaluated the effect of MI on the inherent and social dignity of hemodialysis patients.*

Methods: *A randomized clinical trial was conducted using convenience sampling with 70 hemodialysis patients in Iran. The intervention group received five 120-minute MI sessions over two weeks, based on Miller and Rollnick's framework. Participants completed measures of inherent and social dignity before the intervention, immediately afterward, and again four weeks later.*

Results: *At baseline, the two groups were comparable in terms of inherent and social dignity. MI significantly improved both dimensions. Immediately following the intervention, the intervention group had higher total scores in social dignity (P-value=0.015), particularly in the family support and connection dimension (P-value=0.028). Additionally, notable improvements were seen in total inherent dignity (P-value=0.003), as well as in the family environment (P-value=0.001) and social environment (P-value=0.023) subscales.*

Conclusions: *MI significantly enhances both social and inherent dignity among hemodialysis patients, improving their psychosocial well-being. Healthcare managers should consider integrating MI into dialysis care routines to foster patient dignity and overall quality of life. Future studies are recommended to assess the long-term effects of MI and its applicability across broader clinical populations.*

Keywords: Hemodialysis, Inherent dignity, Motivational interviewing, Social dignity.
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Introduction

The concept of dignity is multifaceted and intricate, and it is a crucial concern in healthcare that consistently underscores the importance of upholding and honoring patients, irrespective of their unique individual, cultural, and social distinctions.[1] The concept can be defined in two distinct manners: inherent and social. Dignity is an inherent privilege of every individual as a member of the human race, serving as a testament to the equal rights possessed by all human beings. Social dignity is influenced by an individual's interactions with others and can be gained or diminished through social communication.[2] There is a correlation between diminished self-esteem and various adverse outcomes such as depression, anxiety, reduced quality of life, and an increased inclination towards suicidal ideation.[3] However, it is essential to note that when patients' dignity is respected and enhanced, it can create a sense of value and resilience. This, in turn, can lead to increased motivation and hope and greater satisfaction with the care they receive.

Additionally, it has been observed that when patients' dignity is prioritized, there is a decrease in the length of hospital stays, along with improvements in both their overall health status and quality of life.[4] One of the primary concerns among individuals with chronic conditions is the potential erosion of their dignity. Therefore, it is imperative for nursing care and interventions to prioritize the preservation and enhancement of the quality of life for these patients.[5]

Few studies have utilized alternative methods to enhance patients' dignity to date. Miller and Rollnick's motivational interviewing (MI) is one of the most effective techniques for treating alcoholism.[6] MI is a cognitive-behavioral therapy emphasizing the patient and identifying and resolving concerns. It alters people's attitudes and beliefs and influences patients' behavior. In this method, emphasizing the patient's objectives and values increases his inner motivation and sense of dignity, while expressing empathy improves his health status control.[7] MI is a flexible method that can be used independently or in conjunction with other treatments, and compared to other behavioral therapy methods, it can produce significant results in a reduced amount of time.[8] According to research, MI has been linked to a reduction in depressive symptoms, an increase in motivation and hope, treatment adherence, and an improvement in the quality of life for hemodialysis patients.[9-11] Bilgin et al. (2022) demonstrated that MI effectively reduces patients' blood pressure, blood sugar levels, emotional distress, and depression and enhances self-efficacy.[12] In addition, Qiqi et al. (2021) found that MI mitigates depression and improves the quality of life in stroke patients.[13]

As previously mentioned, most existing studies on the effects of MI have focused on psychological and behavioral outcomes, whereas the humanistic and ethical dimensions of

care (particularly patient dignity) have received less attention.[14,15] Patient dignity, especially in its inherent and social dimensions, plays a vital role in comprehensive and patient-centered care.[16] Hemodialysis patients, due to their chronic dependence on treatment, repeated exposure to invasive procedures, psychological stress from long-term therapy, and the potential for social stigma and isolation, face significant threats to their dignity. These threats may lead to reduced self-esteem, weakened social identity, and diminished psychosocial resilience, all of which can adversely affect their quality of life and engagement with treatment.[15,17] Promoting patient dignity in such circumstances is not only an ethical imperative but also contributes to increased treatment satisfaction, greater resilience, improved mental health, and overall better quality of life.[16,18] Furthermore, the core features of MI—such as empathy, support for autonomy, and enhancement of intrinsic motivation—are theoretically aligned with the principles of dignity preservation and human value.[19]

Nevertheless, empirical evidence regarding the direct impact of MI on enhancing dignity in hemodialysis patients remains limited. This study aims to address this gap and highlight the importance of dignity-enhancing interventions in dialysis care as part of a more ethical and holistic approach to patient management. Accordingly, the present study was conducted to determine the effect of MI on the inherent and social dignity of patients undergoing hemodialysis.

Materials and Methods

This study was carried out based on randomized controlled trial design in Karun, Iran. Convenience sampling strategies were used to include patients undergoing hemodialysis treatment who met the inclusion and exclusion criteria. Participation required a diagnosis of chronic renal disease, treatment with hemodialysis for at least 6 months, age between 18 and 70, physical engagement in meetings, enough reading and writing proficiency, and making phone calls. Patients were not eligible if they met any of the following exclusion criteria: a history of severe mental illness and substance abuse that prevented them from communicating effectively (as diagnosed by a psychiatrist); the condition made participating impossible; occurrence of stressful events in the preceding month; any previous participation in behavioral therapy or other MI programs; or failing to attend multiple sessions of the intervention. Participants were randomly allocated into a control and an intervention group using block random allocation (Figure 1).

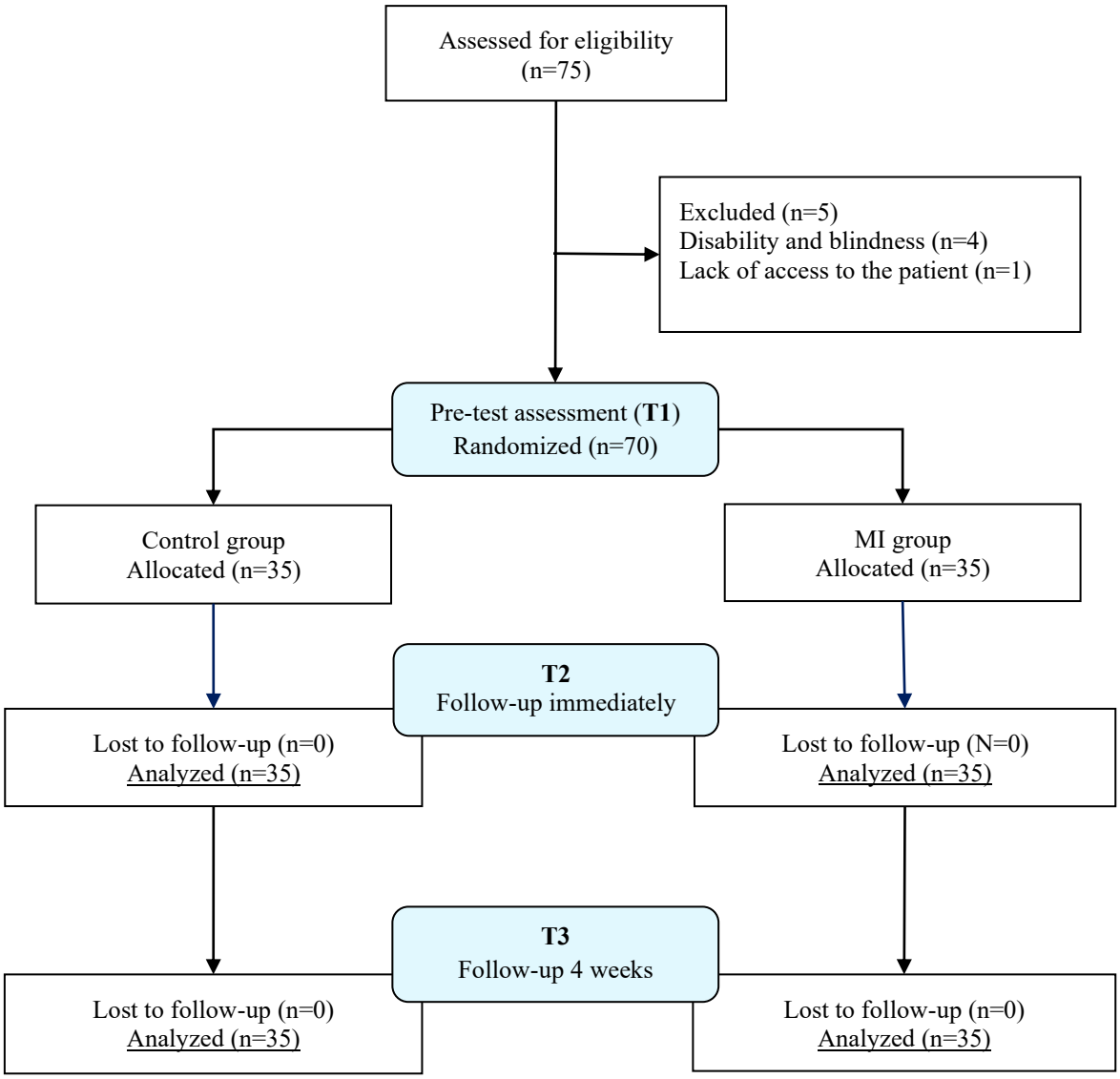

Figure 1: The flow diagram of the study

To estimate the sample size, reference was made to the study by Aliadoost-Ghahfarkhi et al., which investigated variables related to the concept of dignity using similar populations and interventions.[11] The sample size was calculated using the formula for comparing two independent means.

$$n = \frac{(\sigma_A^2 + \sigma_B^2)(Z_{1-\frac{\alpha}{2}} + Z_{1-\beta})^2}{\delta^2}$$

Based on the effect size reported in the aforementioned study, assuming a 95% confidence interval, and 80% statistical power, the required sample size was determined to be 32 participants per group. Allowing for a 10% attrition rate, the final sample size was set at 35 participants in each group.

Informed consent was obtained both verbally and in writing from all participants after providing them with detailed information about the study objectives, procedures, participants' rights, and confidentiality of their data. Participation was entirely voluntary, and participants were assured of their right to withdraw at any point without any consequences. The study was approved by the Research Ethics Committee of Shahroud University of Medical Sciences under the ethics code IR.SHMU.REC.1398.083, and it was registered in the Japan Registry of Clinical Trials under the registration number UMIN000039644.

Patients in both groups were interviewed using a demographic information form, a social dignity questionnaire (SDQ), and an inherent dignity questionnaire (IDQ) before the intervention, immediately following the intervention, and four weeks later. The demographic information form included age,

gender, duration of illness, number of dependents, education, marital, residence and occupational status.

Bagheri et al. (2014) developed the 24-item IDQ, which consists of three dimensions: inherent dignity in the family (9 items), inherent dignity in society (8 items), and inherent dignity in medical contexts (7 items). The responses are graded on a 6-point Likert scale, with a minimum score of 1 and a maximum score of 6 for each item. The mean score of the questionnaire items will determine the total inherent value. More points across all dimensions and the entire questionnaire indicate a high level of dignity. Face, content, and construct validity were employed to validate the questionnaire. The questionnaire's reliability was 0.94 using the Cronbach's alpha method and 0.96 using the split-half method.[20]

The 77-item SDQ was developed by Bagheri et al. in 2014 and includes dimensions of family communication and support (25 items), social communication and support (23 items), health care communication and support (20 items), burden to others (physical, emotional, and social) (6 items), and burden to others (economic) (3 items). The items are graded on a 6-point Likert scale, with the minimum and maximum score for the questionnaire items being 1 and 6, respectively. The average score of the items will be considered as the total score of the questionnaire. A higher score in each dimension and the whole questionnaire indicates a higher social dignity. The validity of the questionnaire was confirmed through face, content, and construct validities (through factor analysis), and its reliability using Cronbach's alpha coefficient was 0.97, and using the splitting method was 0.99.[21]

Following the principles of Miller and Rollnick, the intervention group was divided into two groups of 12 individuals and one group of 11 individuals who received MI as a behavior change counseling program. The intervention in this study was carried out using a 5-session design based on the MI manual by Navidiyan et al. (2011).[22] Table 1 details the topics covered in each session.

Table 1. The structure and content of motivational interview sessions

Title	Content of session
Introduction	Introduction, explaining the purpose of the group, checking the motivation and confidence of the participants, getting to know the rules and norms of the group, announcing the date and time of the other, meetings, the stages of change, and finally preparing for the motivational interview.
Feelings and emotions	Clarifying and helping the participants to understand the inner need for change, expressing and confirming the existence of different feelings during the change, tolerating resistance and involving the participants in the group process, prioritizing the aspects of life that are affected by the disease, and Identifying feelings around these dimensions and discussing them.
Positive and negative aspects of behavior and its change	Focusing on participants' ambivalence, identifying positive and negative aspects of behavior, expanding and increasing awareness of risks by measuring the costs and rewards of individual behavior, emphasizing participants' ability to assess self-efficacy for change, measuring benefits and losses related to change behavior, understanding the problem and providing the appropriate solution for these changes.
Values	Clarifying, identifying, and confirming the participant's values (including personal and social values), creating an inner desire to change, her awareness of the difference between behavior and individual values, strengthening the problem identification process, and tendency to change.
Final vision	Creating a new perspective and identifying situations, evaluating as well as increasing self-confidence, summarizing the contents of previous meetings, starting a behavior change program.

The information covered in the motivational interview sessions was delivered clearly and was tailored to the individual's educational and cultural background. Each intervention group met with the researcher in charge and a clinical psychologist in the conference room at Sina Hospital in Karun to conduct their interviews. Every week, the intervention groups attended two 120-minute motivational interview sessions. During Karoon his time, participants in the control group continued to receive standard treatment, and no participants in the intervention group dropped out of the trial prior to its conclusion. Following research ethics, five motivational interview sessions were conducted with the control group after the study. Due to the nature of the intervention, blinding of participants was not feasible. However, to minimize bias, data collection and analysis were conducted in a blinded manner; data collectors and the analyst were unaware of group allocation.

Quantitative variables such as age and inherent and social dignity were described using mean and standard deviation. In contrast, qualitative variables such as gender, marital status, education level, employment status, place of residence, dependents, and duration of illness were described using frequency and percentage. Quantitative variables were compared between the intervention and control groups using the independent t-test, while qualitative variables were compared using the Chi-square and Fisher's exact tests. Fisher's exact test was applied for variables with fewer than 20 or between 20 and 40 observations and a minimum predicted frequency of fewer than five. The Chi-square test was utilized for variables where the maximal expected frequency was less than 5 by more than 20% (Table 2). The average levels of inherent and social dignity were compared between the intervention and control groups over time using the repeated-measures analysis of variance. SPSS version 26 was used to analyze the data, and a significance level 0.05 was applied.

Results

The mean and standard deviation of the age of the patients in the intervention group was (M=50.26, SD=14.11), and in the control group was (M=50.37, SD=12.53). Most participants in both groups were male, married, and had primary education. The comparison of the intervention and control groups is

shown in Table 2. There was no significant difference in the distribution of demographic variables between the two groups, indicating that the two groups were homogeneous.

Table 2. Demographic characteristics of hemodialysis patients in the intervention and control groups

Variables		Intervention N (%)	Control N (%)	P-value
Gender	Male	18 (51.4)	20 (57.1)	0.810
	Female	17 (48.6)	15 (42.9)	
Marital status	Single	5 (14.3)	7 (20.0)	0.717
	Married	26 (74.3)	25 (71.4)	
	Widowed	3 (8.6)	3 (8.6)	
	Divorced	1 (2.8)	0	
Education	Elementary	23 (65.7)	27 (77.1)	0.212
	High school	4 (11.4)	6 (17.2)	
	Diploma	7 (20.2)	2 (5.7)	
	Academic degree	1 (2.9)	0	
Occupation	Employee	2 (5.7)	1 (2.9)	0.947
	Manual worker	2 (5.7)	2 (5.7)	
	Housewife	14 (40.2)	13 (37.1)	
	Self employed	5 (14.3)	8 (22.9)	
	Retired	7 (20.0)	7 (20.0)	
	Unemployed	5 (14.3)	4 (11.4)	
Number of dependents	0	21 (60.1)	20 (57.1)	0.617
	1	5 (14.3)	8 (22.9)	
	≥2	9 (25.7)	7 (20.0)	
Residence	Urban	25 (71.4)	23 (65.7)	0.548
	Rural	10 (28.6)	12 (34.3)	
Duration of illness (year)	<1	7 (20.0)	7 (20.0)	0.554
	1-5	23 (65.7)	21 (60.1)	
	6-10	5 (14.3)	5 (14.3)	
	>10	0	2 (5.7)	
		Mean (SD)	Mean (SD)	
Age (year)		50.37 (12.53)	50.26 (14.11)	0.970

SD: Standard deviation.

In the repeated-measures ANOVA, the passage of time had a statistically significant effect on the mean score of the "family communication and support" domain of social dignity (F=4.86, P-value=0.028), indicating that the mean score in this domain changed over time regardless of the group. However, the interaction effect between group and time was not significant, suggesting that the mean scores of both groups changed similarly over time (F=2.98, P-value=0.086). For the total score of social dignity, both the main effect of time (F=9.11, P-value=0.002) and the interaction effect between group and time (F=8.22, P-value=0.003) were statistically significant. This indicates that the mean score of social dignity changed over time regardless of the group, and also that the two groups did not change in the same way over time. The intervention group showed a significantly greater increase in social dignity scores compared to the control group (P-value=0.015). In other domains of social dignity, neither the main effect of time nor the interaction effect between group and time was statistically significant.

Regarding inherent dignity, the main effect of time (family environment: F=4.34, P-value=0.020; social environment: F=6.91, P-value=0.009) and the interaction between group and time (family environment: F=16.75, P-value<0.001; social environment: F=41.05, P-value<0.001) were statistically significant for the "family environment", and "social environment" domains. This indicates that mean scores in these domains changed over time regardless of group, and that the pattern of change differed between the two groups. In the intervention group, mean scores in these domains increased significantly compared to the control group (family environment: P-value=0.001; social environment: P-value=0.023). However, the main effect of time on the total score of inherent dignity was not statistically significant (F=1.16, P-value=0.306), meaning that the mean score did not change significantly over time when group differences were not considered. Nonetheless, the interaction between group and time was significant (F=26.64, P-value<0.001), indicating that time had a different effect in the two groups, and the intervention group showed a significantly greater increase in total inherent dignity scores compared to the control group (P-value=0.003). In other domains of inherent dignity, neither the main effect of time nor the interaction effect was statistically significant. It is noteworthy that in all domains of dignity where the interaction effect of time and group was statistically significant, the differences in scores before and immediately after the intervention were also statistically significant (Social dignity: P-value<0.001; family environment (inherent dignity): P-value=0.005). However, in the "social environment" domain of inherent dignity, a significant difference was observed between the scores immediately after the intervention and four

weeks' post-intervention (P-value=0.018). The results of repeated measures ANOVA test for different dimensions of inherent and social dignity are presented in Table 3.

Table 3. Comparison of the average scores of inherent and social dignity and their dimensions at T1, T2, and T3 in each group and between the intervention and control groups

Variables		Group	T1	T2	T3	Time (P-value)	Time*Group (P-value)
Social dignity	Family support	MI	4.25 (0.33)	4.48 (0.35)	4.41 (0.29)	**0.028**	0.086
		Control	4.23 (0.28)	4.25 (0.30)	4.27 (0.31)		
		†P-value	0.796	**0.005**	0.067		
	Community support	MI	3.29 (0.33)	3.48 (0.33)	3.42 (0.38)	0.087	0.256
		Control	3.30 (0.37)	3.34 (0.39)	3.35 (0.31)		
		†P-value	0.884	0.096	0.384		
	Support of health providers	MI	3.46 (0.33)	3.67 (0.33)	3.57 (0.30)	0.093	0.063
		Control	3.51 (0.29)	3.50 (0.50)	3.43 (0.29)		
		†P-value	0.558	0.090	0.056		
	Physical, psychological, and social imposition	MI	1.77 (0.86)	2.31 (1.08)	2.27 (1.13)	0.199	0.083
		Control	1.92 (1.08)	1.87 (1.09)	1.84 (0.99)		
		†P-value	0.532	0.093	0.097		
	Economic imposition	MI	2.20 (1.33)	2.47 (1.28)	2.47 (1.25)	0.211	0.527
		Control	2.05 (1.30)	2.02 (1.29)	1.80 (0.87)		
		†P-value	0.652	0.151	**0.012**		
	Total social dignity	MI	3.48 (0.21)	3.72 (0.28)	3.65 (0.22)	**0.002**	**0.003**
		Control	3.50 (0.25)	3.51 (0.27)	3.49 (0.22)		
		†P-value	0.795	**0.002**	**0.004**		
Inherent dignity	Family environment	MI	4.35 (0.53)	4.86 (0.68)	4.80 (0.81)	**0.020**	**<0.001**
		Control	4.46 (0.51)	4.35 (0.52)	4.05 (0.54)		
		†P-value	0.420	**0.001**	**<0.001**		
	Community environment	MI	3.92 (0.72)	4.06 (0.71)	4.47 (0.80)	**0.009**	**<0.001**
		Control	3.97 (0.50)	3.78 (0.48)	3.68 (0.58)		
		†P-value	0.721	0.062	**<0.001**		
	Treatment environment	MI	4.97 (0.62)	5.03 (0.60)	5.09 (0.48)	0.666	0.217
		Control	4.98 (0.87)	4.87 (0.53)	4.91 (0.61)		
		†P-value	0.946	0.257	0.171		
	Total inherent dignity	MI	4.39 (0.47)	4.64 (0.44)	4.78 (0.58)	0.306	**<0.001**
		Control	4.45 (0.41)	4.31 (0.36)	4.18 (0.41)		
		†P-value	0.578	**0.001**	**<0.001**		

MI: Motivational interview; T1: Pre-test; T2: Follow-up immediately; T3: Follow-up 4 week.

*** ANOVA test with repeated measures and the interaction effect of group and time; Significant P-value is bolded.**

† Independent t-test and comparison of mean scores in the MI group and control group; Significant P-value is bolded.

The findings showed that the intervention led to a significant increase in inherent dignity scores across most demographic subgroups. This effect was observed among different age groups, both genders, and individuals with varying marital status, income levels, place of residence, and duration of illness. However, a significant increase in social dignity scores was reported only in certain subgroups, including women, unmarried individuals, urban residents, those with lower education levels, individuals without income, and participants with (0-1) dependent. In this latter group (0–1 dependent), both inherent and social dignity scores showed significant improvement. In contrast, among participants with two or more dependents, only social dignity scores significantly increased, while inherent dignity scores did not show a meaningful difference. Additionally, for disease duration, both inherent and social dignity scores showed significant differences between the intervention and control groups, regardless of the length of disease (Table 4).

Table 4. The median (interquartile range) of patients' dignity scores in the intervention and control groups based on demographic variables

Variable		Group	Inherent dignity Mdn (IQR)	Social dignity Mdn (IQR)
Age	<50	Intervention	0.29 (0.68)	0.21 (0.30)
		Control	-0.27 (0.86)	0.03 (0.48)
		P-value*	**0.010**	0.217
	≥50	Intervention	0.23 (0.62)	0.17 (0.31)

		Control	-0.46 (0.29)	-0.01 (0.35)
		P-value*	**<0.001**	**0.007**
		Intervention	0.10 (0.57)	0.15 (0.46)
	Male	Control	-0.37 (0.84)	0.01 (0.41)
Gender		P-value*	**0.003**	0.169
		Intervention	0.50 (0.70)	0.21 (0.39)
	Female	Control	-0.37 (0.34)	0.03 (0.37)
		P-value*	**<0.001**	**0.005**
		Intervention	0.29 (0.75)	0.16 (0.23)
	Married	Control	-0.25 (0.63)	0.01 (0.43)
Marital status		P-value*	**0.014**	0.165
		Intervention	0.29 (0.72)	0.21 (0.32)
	Single	Control	-0.48 (0.54)	0.01 (0.36)
		P-value*	**<0.001**	**0.021**
		Intervention	0.29 (0.58)	0.21 (0.32)
	≤Diploma	Control	-0.5 (0.29)	-0.01 (0.44)
Education		P-value*	**<0.001**	**0.006**
		Intervention	0.35 (1.24)	0.18 (0.19)
	>Diploma	Control	0.16 (0.71)	0.03 (0.39)
		P-value*	0.215	0.208
		Intervention	0.33 (0.64)	0.21 (0.40)
	No income	Control	-0.33 (0.42)	0.04 (0.44)
Employment and source of income		P-value*	**<0.001**	**0.023**
		Intervention	0.15 (0.69)	0.15 (0.32)
	Having income	Control	-0.5 (0.77)	0 (0.31)
		P-value*	**0.002**	0.084
		Intervention	0.33 (0.78)	0.21 (0.34)
	City	Control	-0.45 (0.54)	0.01 (0.39)
Residence		P-value*	**<0.001**	**0.004**
		Intervention	0.22 (0.46)	0.15 (0.49)
	Village	Control	-0.28 (0.45)	0.01 (0.38)
		P-value*	**0.003**	0.381
		Intervention	0.29 (0.66)	0.17 (0.32)
	<5 years	Control	-0.31 (0.74)	0.01 (0.36)
Duration of disease		P-value*	**<0.001**	**0.022**
		Intervention	0.08 (1.16)	0.21 (0.30)
	≥5 years	Control	-0.5 (0.33)	0.01 (0.32)
		P-value*	**0.004**	**0.034**
		Intervention	0.29 (0.66)	0.21 (0.29)
	0-1	Control	0.37 (0.66)	0.01 (0.37)
Number of dependents		P-value*	<0.001	0.004
		Intervention	0.08 (0.53)	0.22 (0.68)
	≥2	Control	-0.45 (1.03)	0.01 (0.85)
		P-value*	0.198	**0.010**

Mdn: Median; IQR: Interquartile Range; *The P-value was obtained based on the Mann-Whitney U test.

Discussion

The findings of this study demonstrate that MI has a positive impact on several aspects of dignity among patients undergoing hemodialysis. Repeated-measures ANOVA revealed a statistically significant increase in the total score of social dignity over time, with the intervention group showing greater improvement compared to the control group. Notably, this improvement was most evident immediately after the intervention and persisted, albeit less strongly, four weeks later. Among the domains of social dignity, a significant change over time was observed only in the "family communication and support" domain, although the change was similar in both groups.

Regarding inherent dignity, patients in the intervention group experienced more substantial improvements in the "family environment" and "social environment" domains compared to those in the control group. While the overall score of inherent dignity did not show a significant change over time, the interaction effect between group and time was statistically significant, indicating greater improvements in the intervention group. These findings suggest that MI may enhance specific dimensions of both inherent and social dignity in hemodialysis patients, particularly in domains related to interpersonal and familial relationships.

MI, as described by Miller and Rollnick (2002), is a client-centered, humanistic approach that fosters intrinsic motivation for change through collaboration, empathy, and respect for patient autonomy.[23] This approach aligns with dignity-based care, which seeks to enhance self-esteem, meaning in life, and quality of life while reducing psychological distress in patients with chronic conditions.[5] The present study demonstrates that

MI positively impacts the dignity of hemodialysis patients, improving their psychosocial well-being by fostering hope, motivation, and a sense of value. These findings are consistent with prior research showing that MI enhances psychological and behavioral outcomes, such as emotional distress, adherence to treatment, self-efficacy, and quality of life, which serve as critical foundations for dignity in chronic illness.[12] By addressing psychological barriers like depression and hopelessness, MI empowers patients to engage more effectively in their social and personal lives, thereby supporting their sense of dignity.

Previous studies have demonstrated MI's efficacy across various chronic conditions, including renal disease. Kusumawardani et al. (2022) found that MI significantly reduced hopelessness and increased motivation in patients with end-stage renal disease, enabling them to better cope with the psychological burdens of dialysis.[10] Dashtidehkordi et al. (2018) demonstrated that MI with a five-session framework enhanced the overall health of hemodialysis patients in the intervention group compared to the control group.[24] MI has dramatically improved treatment adherence and quality of life in patients with chronic hemodialysis.[9,25] Similarly, Alidoust-Ghahfarokhi et al. (2016) reported that a five-session MI program reduced depression and enhanced hope in hemodialysis patients, outcomes that likely contribute to a greater sense of personal and social value[11]. A meta-analysis by Lundahl et al. (2013) of 48 randomized controlled trials found that MI has a moderate effect size (d=0.35) on self-efficacy and quality of life across chronic illnesses, including diabetes and cardiovascular disease, suggesting its broad applicability.[26] Bombardier et al. (2013) demonstrated that telephone-based MI reduced depression and increased hope in patients with multiple sclerosis, indicating that MI's benefits extend to neurological conditions and may enhance patients' sense of agency and well-being.[27] Additionally, Shahgholian et al. (2018) found that MI improved the health status of hemodialysis patients, particularly by enhancing psychological well-being and treatment adherence, further supporting its relevance for renal populations.[15] These studies collectively suggest that MI's ability to foster hope, motivation, and self-efficacy creates a psychological foundation that supports dignity by enhancing patients' capacity to navigate the challenges of chronic illness. The present study is consistent with the studies above in that patients undergoing dialysis treatment are at risk for a decline in dignity as a result of their physical and mental health problems and that this decline is linked to feelings of depression, anxiety, hopelessness, and a poor quality of life.[3,5] As a result, interventions that lessen the severity of these problems, particularly in terms of quality of life, can also boost individuals' sense of dignity.

Other interventions, such as dignity therapy and continuous care models, have similarly enhanced dignity in chronic patients by addressing psychological and social needs.[28,29] According to Kane et al. (2017), dignity is an inherent quality that can be further supported through advocacy and education, suggesting that MI's focus on empowerment is particularly suited to dignity-enhancing care.[30] These results underscore the potential of integrating MI into routine hemodialysis care to improve patients' quality of life and psychosocial well-being, setting the stage for exploring its specific effects on social and inherent dignity.

Consistent with Nikkhah et al.'s,[28] we found that the average scores of inherent and social dignities in family communication and support considerably increased after the intervention. According to Griva et al. (2019), patients and their families dealing with dialysis experience various physical, psychological, economic, and social difficulties. Therefore, family members need to be involved in the healthcare planning process alongside patients.[31] Consistent with the current research findings, Wang et al. (2021) found that the dignity therapy program involving family engagement increased patients' optimism, spiritual well-being, and family unity. Anxiety and depression decreased among family caregivers, while family adjustment improved. As a result, patients and families benefited from the introduction of dignity-enhancing therapies.[32] Therefore, family communication and support are recommended for enhancing patients' social and inherent dignity.

A qualitative study in palliative care settings found that family support is central to maintaining patients' dignity, offering emotional connection, identity affirmation, and a sense of belonging—especially in collectivist cultures.[33] It must be recognized that human dignity and the family are fundamental to Iranian culture and that illness and health are regarded as divine gifts. As a result, family support increases during illness, eventually improving the patient's dignity.[34]

According to the study by Xiao et al., dignity therapy programs that explicitly involve family members have been shown to enhance patients' spiritual well-being, reduce depression, and improve perceived dignity.[35] Moreover, a systematic review on randomized controlled studies in MI and analogous psychosocial interventions in chronic illness populations indicate consistent improvements in quality of life, self-efficacy, and patient activation—psychological constructs that are strongly predictive of dignity-related outcomes.[36] Increased self-efficacy and patient engagement may enable patients to better leverage existing family support, thereby amplifying the impact of cultural family unity on social dignity. Furthermore, observational studies confirm that perceived social support positively correlates with treatment adherence and psychosocial resilience in hemodialysis patients —key components of subjective social dignity.[37] Taken together, our findings suggest a possible pathway: MI enhances patient activation and psychological empowerment, which then strengthens family communication support, ultimately contributing to greater social dignity.

Similar to the research conducted by Houmann et al. (2014) and Nikkhah et al. (2021),[28,38] the current study assessed the impact of MI on the enhancement of intrinsic dignity in a community setting. However, Vaghee et al.'s (2013) research contradicted this finding.[29] Possible explanations for this divergence include the high baseline and stable over-time levels of social support observed in both the intervention and control groups of Vaghee et al.'s study.[29] However, in the current study, the average scores for the dimension of community environment are nearly zero, enhancing the capacity to discover significant differences across groups. According to Kane et al. (2017), dignity is not only an internal perception, but also a relational and environmental construct that is influenced by social interactions and public cognition.[30]

These findings are consistent with Nordenfelt's (2004) view that social dignity is strongly dependent on how individuals are treated by others and on their perceived social worth within the community.[39] Similarly, a study by Osterveld-Vlog et al. (2013) in long-term care settings found that perceptions of appreciation from the community and the ability to participate in meaningful social roles significantly influenced older adults' sense of dignity.[40] This reinforces the importance of designing interventions that take into account the social context of patients, especially patients such as hemodialysis patients who may experience social stigma or marginalization.

In the current study, the average scores of inherent and social dignities for the dimensions of medical staff support and therapeutic environment increased after the intervention, but this increase was not statistically significant. Houmann et al. (2014) found that dignity therapy did not significantly boost healthcare providers' support by a statistically significant amount.[38] Several causes contribute to this problem, including medical staff ignorance of the significance of preserving patients' dignity and the circumstances affecting it, a lack of training in how to deal with patients appropriately, and nursing exhaustion and burnout caused by working long shifts. Franco et al. (2020) believe that nurses play a significant role in ensuring patients' dignity and emphasize the importance of training for nursing staff and students to improve their abilities to implement dignity-enhancing treatments in patients.[41]

MI did not affect the average score of social dignity in the area of burden to others in the current study. Griva et al. (2019) demonstrated that appropriate interventions to address concerns about the dignity of patients and their families can effectively improve the patient's relationship with the family, change the family's attitude toward the patient, and preserve the patient's dignity.[31] Xiao et al. (2022) provided dignity treatment to the elderly in nursing homes and individual counseling to their family members.[35] Counseling assisted families in gaining fresh insights into their patients, managing their skepticism, and recognizing their patients' needs. These characteristics significantly lowered the psychological strain on families and improved patient dignity-related distress. In any event, such work was not done in the current study, which could explain why MI did not affect the specified aspects.

The findings suggest that the effect of the intervention on inherent dignity was broad and independent of most sociodemographic characteristics, while its impact on social dignity appeared to be more pronounced among socially vulnerable groups. Specifically, improvements in social dignity were mainly observed among women, unmarried individuals, urban residents, participants with lower educational attainment or no income, and those with fewer dependents. Interestingly, in the subgroup of participants with (0-1) dependent, both inherent and social dignity scores improved significantly, whereas among those with two or more dependents, only social dignity increased significantly. This pattern may reflect the greater psychosocial burden experienced by individuals with more dependents, potentially limiting their capacity to benefit from interventions aimed at enhancing inherent dignity, which is closely linked to a sense of personal worth and self-concept. On the other hand, participants with fewer family responsibilities may have had greater psychological space and emotional resources to internalize and respond to the intervention. These findings align with previous literature suggesting that caregiving responsibilities and social roles can influence individuals' receptiveness to dignity-conserving interventions[42].

For example, Martín-Abreu et al. (2022) found that lower educational level and reduced social support predicted lower dignity scores in older adults with advanced cancer.[43] Similarly, general frameworks in dignity research emphasize that intrinsic dignity is relatively stable, whereas social or relational dignity is more susceptible to sociodemographic factors such as education, support networks, and caregiving burdens frontiersin.[16]

One notable advantage of the current investigation is the ease of access to the intervention circumstances and novel approach to address social and inherent dignities in hemodialysis. Hence, this approach can serve as a valuable tool for healthcare professionals, enabling them to prioritize patients' rights and deliver high-quality and ethically compliant care. However, several limitations should be acknowledged. First, the sample was drawn from only one hemodialysis center in a specific city, which could negatively impact the generalizability of the results, as cultural, social, and care settings may differ across regions. Second, despite the relative homogeneity of background variables in the intervention and control groups, some uncontrolled confounding factors such as personality traits, individual motivation, level of social support, previous psychological interventions and family support,[44,45] or individual coping mechanisms outside the treatment setting could influence patients' responses to MI. Third, although MI was delivered under controlled conditions, individual differences in communication style and patient engagement may have influenced the outcomes. Fourth, the study relied solely on self-reported data for measuring social and inherent dignity, which is subject to response bias and social desirability effects. Patients might have over- or under-reported their experiences due to personal beliefs, memory inaccuracies, or the desire to present themselves in a favorable light. Fifth, the control group did not receive any alternative psychosocial intervention. Hence, it is not possible to conclude whether MI is more effective than other supportive methods such as cognitive behavioral therapy or peer support groups.[46] In the present study, psychological variables such as anxiety, depression, and hope were not assessed. Therefore, we recommend that future research take these psychological dimensions of hemodialysis patients into account. Finally, the follow-up period was relatively short; therefore, the long-term sustainability of the observed improvements remains unknown. Therefore, the results of this study should be interpreted within the context of the above limitations, and further research is needed to generalize the findings. It should be acknowledged that human dignity is a culture-dependent construct. Accordingly, the findings of the present study are most applicable within the Iranian sociocultural context. The cultural norms shaping Iranian society may not be directly transferable to other or more culturally diverse healthcare systems. Future studies should evaluate and implement dignity-enhancing interventions that are tailored to the cultural context of each society.

This study demonstrated the effectiveness of MI in promoting both inherent and social dignity among hemodialysis patients. These findings suggest that integrating this approach into patient care may foster more respectful, dignity-based practices in dialysis settings, facilitated by multidisciplinary healthcare providers such as mental health educators, psychiatric nurses, and psychologists. Future research could also explore alternative delivery formats, such as remote MI, as well as complementary methodologies, including mixed-methods or qualitative approaches. In addition, future studies could benefit from incorporating other types of interventions alongside MI, such as meditation and mindfulness.

Ethical Considerations

Informed consent was obtained from all participants both verbally and in writing after they were provided with detailed information about the study objectives, procedures, participants' rights, and data confidentiality. Participation was entirely voluntary, and participants were assured of their right to withdraw at any time without consequences. The study was approved by the Research Ethics Committee of Shahroud University of Medical Sciences (Ethics Code: IR.SHMU.REC.1398.083).

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Conflict of Interest

The authors declare that they have no conflict of interest.

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References

1. Simões Â, Sapeta P. The concept of dignity in nursing care: a theoretical analysis of the ethics of care.2. Chua KZY, Quah ELY, Lim YX, et al. A systematic scoping review on patients' perceptions of dignity. BMC palliative care. 2022;21(1):118. doi: 10.1186/s12904-022-01004-4

3. Salehi K, Shirani F, Atashi V, et al. The Relationship of Respecting Inherent Dignity with Anxiety, Depression, Stress and Quality of Life in Patients with Heart Failure. Shiraz E-Medical Journal. 2020;21(8):e96624. doi: 10.5812/semj.96624

4. Bagheri H, Yaghmaei F, Ashktorab T, et al. Test of a Dignity Model in patients with heart failure. Nursing Ethics. 2018;25(4):532-546. doi: 10.1177/0969733016658793

5. Igai Y. Concept analysis of dignity-centered care for people with chronic progressive disease. Japan Journal of Nursing Science. 2020;17(2):e12302. doi: 10.1111/jjns.12302

6. Miller WR. Motivational interviewing with problem drinkers. Behavioural and Cognitive Psychotherapy. 1983;11(2):147-172. doi: 10.1017/S0141347300006583

7. Frey AJ, Lee J, Small JW, et al. Mechanisms of motivational interviewing: A conceptual framework to guide practice and research. Prevention science. 2021;22:689-700. doi: 10.1007/s11121-020-01139-x

8. Arkowitz H, Miller WR, Rollnick S. Motivational interviewing in the treatment of psychological problems. Guilford Publications; 2015.

9. Ok E, Kutlu Y. The effect of motivational interviewing on adherence to treatment and quality of life in chronic hemodialysis patients: a randomized controlled trial. Clinical Nursing Research. 2021;30(3):322-333. doi: 10.1177/1054773820974158

10. Kusumawardani D, Muhsinin SZ, Pujiningsih E. The Influence of Motivational Interviewing with Spiritual Approach to the Hopelessness and Motivation of A Patient ESRD which Helpes Regular Hemodialisis. Jurnal Keperawatan. 2022;14(S1):285-294.

11. Alidoust-Ghahfarokhi F, Kiyan-Ersi F. Effectiveness of motivational interviewing on depression and hope on dialysis patients in Hajar Hospital of Shahrekord in 2013. Journal of Clinical Psychology. 2016;8(4):85-93.

12. Bilgin A, Muz G, Yuce G. The effect of motivational interviewing on metabolic control and psychosocial variables in individuals diagnosed with diabetes: Systematic review and meta-analysis. Patient Education and Counseling. 2022; doi: 10.1016/j.pec.2022.04.008

13. Qiqi N, Hangting L, Jia W, et al. A Meta-analysis of the Effect of Motivational Interviewing on Depression, Anxiety, and Quality of Life in Stroke Patients. Journal of Neuroscience Nursing. 2021;53(6):244-250. doi: 10.1097/JNN.0000000000000617

14. Baumgart A, Craig JC, Tong A. Qualitative research in CKD: how to appraise and interpret the evidence. American journal of kidney diseases: the official journal of the National Kidney Foundation. 2021;77(4):538-541. doi: 10.1053/j.ajkd.2020.12.011

15. Shahgholian N, Yousefi H. The lived experiences of patients undergoing hemodialysis with the concept of care: a phenomenological study. BMC nephrology. 2018;19(1):338. doi: 10.1186/s12882-018-1138-4

16. Laranjeira C. Dignity promotion in people with advanced chronic diseases: contributions for a value-based healthcare practice. Frontiers in Public Health. 2023;11:1156830. doi: 10.3389/fpubh.2023.1156830

17. Alkhaqani A. Psychological Impact of Chronic Kidney Disease and Hemodialysis: Narrative Review. Psychosom Med Res. 2022;4(2):1-5. doi: 10.53388/202209

18. Nikpey S, Ghafourifard M, Ghahramanian A. The association of compassionate care and coping with disease among patients undergoing hemodialysis. Renal Replacement Therapy. 2023;9(1):43. doi: 10.1186/s41100-023-00499-8

19. Boom SM, Oberink R, Zonneveld AJ, et al. Implementation of motivational interviewing in the general practice setting: a qualitative study. BMC primary care. 2022;23(1):21. doi: 10.1186/s12875-022-01623-z

20. Bagheri H, Yaghmaei F, Ashktorab T, et al. Development and psychometric properties of Inherent Dignity Questionnaire in heart failure patients. Iranian Journal of Medical Ethics and History of Medicine. 2014;6(6):33-44.

21. Bagheri H, Yaghmaei F, Ashktorab T, et al. Development & psychometric properties of the social dignity questionnaire in heart failure patients. Iranian Journal of Medical Ethics and History of Medicine. 2014;6(6):20-32.

22. Navidiyan A, Sharifi HP. Practical guide to motivational interviewing. Zahedan. Sokhan Gostar Pub. 2012:98-166.

23. Miller WR, Rollnick S. Motivational interviewing: Helping people change. Guilford press; 2012.

24. Dashtidehkordi A, Shahgholian N, Maghsoudi J, et al. The effects of motivational interviewing on the health status of patients undergoing hemodialysis. Iranian Journal of Nursing and Midwifery Research. 2018;23(4):287. doi: 10.4103/ijnmr.IJNMR_75_17

25. Raja R, Paneerselvam G. Pos-649 impact of pharmacist intervention through motivational interview in improving medication adherence among hemodialysis patients: Preliminary findings. Kidney International Reports. 2022;7(2):S278. doi: 10.1016/j.ekir.2022.01.682

26. Lundahl B, Moleni T, Burke BL, et al. Motivational interviewing in medical care settings: a systematic review and meta-analysis of randomized controlled trials. Patient education and counseling. 2013;93(2):157-168. doi: 10.1016/j.pec.2013.07.012

27. Bombardier CH, Ehde DM, Gibbons LE, et al. Telephone-based physical activity counseling for major depression in people with multiple sclerosis. Journal of consulting and clinical psychology. 2013;81(1):89. doi: 10.1037/a0031242

28. Nikkhah T, Bagheri H, Khajeh M, et al. The effect of post-discharge telephone follow-up on the inherent dignity of patients with heart failure. Avicenna Journal of Nursing and Midwifery Care. 2021;29(2):91-101. doi: 10.30699/ajnmc.29.2.91

29. Vaghee S, Mazlom S, Davoudi N, et al. The effect of dignity therapy on human dignity in patients with chronic renal failure undergoing hemodialysis. Evidence Based Care. 2013;3(2):63-72.

30. Kane J, de Vries K. Dignity in long-term care: An application of Nordenfelt's work. Nursing ethics. 2017;24(6):744-751. doi: 10.1177/0969733015624487

31. Griva K, Seow PS, Seow TY-Y, et al. Patient-related barriers to timely dialysis access preparation: a qualitative study of the perspectives of patients, family members, and health care providers. Kidney medicine. 2020;2(1):29-41. doi: 10.1016/j.xkme.2019.10.011

32. Wang C, Chen J, Wang Y, et al. Effects of family participatory dignity therapy on the psychological well-being and family function of patients with haematologic malignancies and their family caregivers: A randomised controlled trial. International Journal of Nursing Studies. 2021;118:103922. doi: 10.1016/j.ijnurstu.2021.103922

33. Sailian SD, Salifu Y, Preston N. Dignity enhanced through faith & family support in palliative care: a qualitative study. BMC Palliative Care. 2024;23(1):142. doi: 10.1186/s12904-024-01478-4

34. Bagheri H, Yaghmaei F, Ashktorab T, et al. Patient dignity and its related factors in heart failure patients. Nursing ethics. 2012;19(3):316-327. doi: 10.1177/0969733011425970

35. Xiao J, Chow KM, Choi KC, et al. Effects of family-oriented dignity therapy on dignity, depression and spiritual well-being of patients with lung cancer undergoing chemotherapy: a randomised controlled trial. International Journal of Nursing Studies. 2022;129:104217. doi: 10.1016/j.ijnurstu.2022.104217

36. Haneef SH, Abdullah M. Effects of dignity therapy for palliative care patients and family caregivers: A systematic review. Cureus. 2024;16(9) doi: 10.7759/cureus.70431

37. Sailian SD, Salifu Y, Preston N. Family caregivers' role in dignity: A qualitative study can we change the title to: Dignity in Serious Illness: A Qualitative Exploration of Family Caregivers' Contributions in low middle-income country. Palliative & supportive care. 2025;23:e61. doi: 10.1017/S1478951525000100

38. Houmann LJ, Chochinov HM, Kristjanson LJ, et al. A prospective evaluation of Dignity Therapy in advanced cancer patients admitted to palliative care. Palliative medicine. 2014;28(5):448-458. doi: 10.1177/0269216313514883

39. Nordenfelt L. The varieties of dignity. Health care analysis. 2004;12(2):69-81. doi: 10.1023/B:HCAN.0000041183.78435.4b

40. Oosterveld-Vlug MG, Pasman HRW, van Gennip IE, et al. Dignity and the factors that influence it according to nursing home residents: a qualitative interview study. Journal of Advanced Nursing. 2014;70(1):97-106. doi: 10.1111/jan.12171

41. Franco H, Caldeira S, Nunes L. Dignity in nursing: A synthesis review of concept analysis studies. Nursing ethics. 2021;28(5):734-749. doi: 10.1177/0969733020961822

42. Chochinov HM, Hack T, Hassard T, et al. Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. J Clin Oncol. 2005;23(24):5520-5. doi: 10.1200/JCO.2005.08.391

43. Martín-Abreu CM, Hernández R, Cruz-Castellanos P, et al. Dignity and psychosocial related variables in elderly advanced cancer patients. BMC geriatrics. 2022;22(1):732. doi: 10.1186/s12877-022-03423-7

44. Mirhosseini S, Heshmati Nabavi F, Behnam Vashani H, et al. Evaluating the effect of online psychoeducational support group on perceived stress in family caregivers of COVID-19 survivors. OMEGA-Journal of Death and Dying. 2025;90(4):1685-1700. doi: 10.1177/00302228221126219

45. Khouban-Shargh R, Mirhosseini S, Ghasempour S, et al. Stress management training program to address caregiver burden and perceived stress among family caregivers of patients undergoing hemodialysis: a randomized controlled trial study. BMC nephrology. 2024;25(1):350. doi: 10.1186/s12882-024-03795-5

46. Abbasi A, Ebrahimi H, Bagheri H, et al. A randomized trial of the effect of peer education on the sexual quality of life in patients with myocardial infarction. Journal of Complementary and Integrative Medicine. 2020;17(3):20190204. doi: 10.1515/jcim-2019-0204