Health Coaching Based on Social Cognitive Theory in Increasing Compliance with Fluid Restrictions, Controlling Interdialytic Weight Gain and Improving the Quality of Life of Hemodialysis Patients

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ABSTRACT
Background: Chronic kidney failure requires long-term treatments like hemodialysis, a vital therapy for managing the disease. Patient compliance with fluid restrictions and controlling interdialytic weight gain (IDWG) significantly impacts therapy effectiveness. Health coaching based on social cognitive theory may enhance understanding, motivation, and healthy behaviors in hemodialysis patients.
Purpose: This study aims to analyze the impact of health coaching based on social cognitive theory on compliance with fluid intake restrictions, IDWG control, and quality of life in chronic kidney failure patients undergoing hemodialysis.
Methods: A quasi-experimental study with a pre-post test control group design involved 38 hemodialysis patients selected via simple random sampling. The intervention group received social cognitive theory-based health coaching sessions for four weeks, while the control group received standard care following hospital procedures. Data collection included daily fluid restriction records, IDWG measurements, and a validated quality of life questionnaire, with pre- and post-intervention comparisons.
Results: The intervention group demonstrated a significant improvement in compliance with fluid restrictions ($p < 0.011$), better IDWG control ($p < 0.021$), and enhanced quality of life ($p < 0.001$) compared to the control group.
Conclusion: Health coaching based on social cognitive theory effectively improves fluid restriction compliance, reduces IDWG, and enhances the quality of life in hemodialysis patients. Integrating this approach into routine hemodialysis care can optimize therapeutic outcomes and significantly benefit patients.

Keywords: fluid restrictions, health coaching, hemodialysis, interdialytic weight gain, quality of life, social cognitive theory

BACKGROUND

Chronic kidney disease is a clinical syndrome caused bydecline kidney functionpermanent, chronic, irreversible progressiveness which is manifested by a decrease in the glomerular filtration rate below 60 ml/minute per 1.73m2, or kidney damage, or both, for at least 3 months, whatever the cause underlying it(Ayat Ali et al., 2021). PPatients with end-stage chronic kidney disease require renal replacement therapy consisting of kidney transplantation or dialysis (Mahyuvi & Hasina, 2021; Moeinzadeh et al., 2019).

Patient compliance with limiting fluid intake and controlling interdialytic weight gain (IDWG) is an important aspect in the management of chronic renal failure that requires special attention. Chronic kidney failure sufferers undergoing hemodialysis mostly find it difficult to control fluid intake restrictions, causing therapy failure which can reduce the patient's quality of life and increase mortality and morbidity rates. Based on a preliminary study conducted by researchers at the Surabaya Islamic Hospital, Indonesia, it is known that in 2021 the number of patients with chronic kidney disease will be 869 cases, and in 2022 it will increase to 983 cases. An increase in interdialytic weight gain (IDWG) was also observed in hemodialysis patients at Surabaya A. Yani Islamic Hospital. Observation results in May 2023 of 20 patients, there were 5 patients (25%) experiencing interdialytic weight gain was more than 3%, and 6 patients (30%) experienced interdialytic weight gain between 1-3%. Patients with increased interdialytic weight gain (IDWG) reported during examination that they had difficulty resisting thirst, limiting fluid intake especially in hot weather. Apart from that, the number of Cito hemodialysis patients with worsening conditions also increased from 2-3 patients in April 2023 to 5 patients in May 2023.

In Indonesia, the incidence of chronic kidney disease is 0.38% or 3.8 cases per 1000 Indonesian population(Tim Riskesdas, 2018). Research conducted by(Siskawati & Simanullang, 2022)thatin hemodialysis patients, non-compliance with fluids is around 10% - 60%, diet 2% - 57%, delay in dialysis time 19%, medication 9%, and hemodialysis patients also experience difficulties with limiting fluid intake.As a result, many problems such as fluid overload, electrolyte imbalance, and acid-base imbalance occur which are detrimental to the patient's overall health (Mina et al., 2019a).

Non-compliance with fluid restrictions and increased Interdialytic Weight Gain (IDWG) in hemodialysis patients are influenced by a number of interrelated factors. First, individual factors such as a lack of understanding or knowledge about the importance of fluid restriction, accompanied by a lack of motivation to comply with this rule. Second, environmental factors include family support or a social environment that does not support maintaining fluid restrictions. In addition, physical aspects such as symptoms of thirst that cause the desire to drink more and underlying medical conditions such as heart disease or other health problems also influence IDWG in hemodialysis patients. (Wijaya & Padila, 2019). Apart from that, the increase in IDWG can be caused by various factors such as age, gender, education level, thirst, stress, and self-efficacy. (Mustikasari, 2020). Uncontrolled fluid restriction can lead to dangerous situations. One of the dangerous conditions in people with chronic kidney failure is body weight that exceeds 5% of dry body weight. This condition causes various complications such as hypertension, intradialysis hypotension, left heart failure, ascites, pleural effusion, congestive heart failure and can lead to death. (Tamaura et al., 2019). Excess fluid can also cause impaired physical ability, increased dilatation, ventricular hypertrophy, pulmonary edema and pulmonary dysfunction (Mina et al., 2019b).

Health coaching is an intervention that is expected to help patientsgain the knowledge, skills, tools, and confidence to become active participants in their care so they

can achieve their self-identified health goals(Bennett et al., 2010).Previous research has shown that health coaching is effective in increasing patient compliance with medication, diet management and physical activity in patients with various medical conditions. (Radandima et al., 2020). The social cognitive theory put forward by Bandura discusses human behavior in a three-way reciprocity framework (triadic reciprocability), which means a mutually causal relationship between three factors, namely behavior, personal and cognitive factors (person), and the environment (environment), each of which -each works independently as a determining factor for other factors(Schunk & DiBenedetto, 2020). Previous research shows that the social cognitive theory approach has an effect on self-efficacy and diet compliance(Manjarres-Posada et al., 2020).However, there has been no research that tested the effectiveness of health coaching based on social cognitive theory on compliance with fluid restrictions, interdialytic weight gain and quality of life in chronic kidney failure patients undergoing hemodialysis, so the researchers wanted to analyze the influencehealth coaching based on social cognitive theory on compliance with fluid intake restrictions, interdialytic weight gain and quality of life in chronic kidney failure patients undergoing hemodialysis.

OBJECTIVE

Objective states the major aim of the studyAnalyzeThe influence of health coaching based on social cognitive theory on compliance with fluid intake restrictions, interdialytic weight gain and quality of life in chronic kidney failure patients undergoing hemodialysis.

METHODS

Quantitative research using a quasi-experimental with a pre- and post-test control group design. Independent Variablehealth coaching based on social cognitive theoryand the dependent variable iscompliance with fluid intake restrictions, interdialytic weight gain and quality of life. The sampling technique used in this research is purposive sampling. The number of respondents is 38 people. The research was conducted at Surabaya Islamic Hospital, Indonesia. The study was conducted in December 2023- January 2024. Before conducting this research, an ethical review of the protocol had been carried out and it was declared ethically worthy with number118.EC.KEP.RSIAY.11.2023. The statistical test of the research results used the Chi square test, T Test, Mann Whitney, Wilcoxon test.

RESULTS

The research results obtained by the researchers are as follows:

Table 1. Distribution of demographic characteristics and equality test in the treatment and control groups

Respondent Characteristics	Group		Total (38)	Equality value	p
	Treatment (n=19)	Control (n=19)			
Gender					
Man	13 (68.4%)	12 (63.2%)	25 (65.8%)	1,000a	
Woman	6 (31.6%)	7 (36.8%)	13 (34.2%)		
Age					
Range (Median)	35 - 68 (54.00)	26 - 60 (50.00)	26 - 68 (51.50)	0.114b	
Mean ± SD	53.74 ± 10.26	48.74 ± 8.68	51.24 ± 9.71		
Education					
Elementary School	1 (5.3%)	1 (5.3%)	2 (5.3%)	0.159c	

Junior High School	1 (5.3%)	5 (26.3%)	6 (15.8%)	
Senior High School	12 (63.1%)	10 (52.6%)	22 (57.9%)	
PT	5 (26.3%)	3 (15.8%)	8 (21.0%)	
Work				
Doesn't work	12 (63.2%)	16 (84.2%)	28 (73.7%)	0.269a
Work	7 (36.8%)	3 (15.8%)	10 (26.3%)	
Marital status				
Not married yet	1 (5.3%)	0 (0.0%)	1 (2.6%)	1,000a
Marry	18 (94.7%)	19 (100%)	37 (97.4%)	
Old HD				
Range (Median)	1.0 - 8.0 (3.50)	1.0 - 8.4 (4.0)	1.0 - 8.4 (3.75)	0.815b
Mean ± SD	3.92 ± 2.19	4.08 ± 2.07	4.00 ± 2.11	

[a] Chi square test, bT Test, cMann Whitney

Based on table 1. description of demographic characteristics Gender for the treatment group of 19 respondents was male 13 (68.4%) respondents while for women as much 6 (31.6%) respondents, for the control group of 19 male respondents 12 (63.2%) respondents while for women as much 7 (36.8%) respondents. Based on the results of the equality test, a p value of 1.000 was obtained.

Based ondescription of age demographic characteristics seen fromrange and Mean ± Sd demographic age values for the treatment group of 19 respondents found an age range of 35 to 68 years with a Mean ± Sd of53.74 ± 10.26 for the control group of 19 respondents, the age range was 26 to 60 years with a Mean ± SD of48.74 ± 8.68. Based on the results of the equality test, the p value was 0.114.

Based on the description of demographic characteristics education for the treatment group of 19 respondents obtained elementary school education 1 (5.3%) respondent, JUNIOR HIGH SCHOOL 1 (5.3%) respondent, high school 12 (63.1%) as many respondents and PT5 (26.3%) respondents, for the control group of 19 respondents, they received as much as elementary school education 1 (5.3%) respondent, junior high school (26.3%) respondent, high school 10 (52.6%) as many respondents and PT 3 (15.8%) respondents. Based on the results of the equality test, the p value was 0.159.

Based on the description of demographic characteristics work for the treatment group of 19 respondents found that they did not work as much 12 (63.2%) respondents and 7 (36.8%) who worked, for the control group of 19 respondents it was found that they did not work as much 16 (84.2%) respondents and 3 (15.8%) who worked. Based on the results of the equality test, the p value was 0.269.

Based on the description of demographic characteristics Married status for the treatment group of 19 respondents was found to be as many as unmarried 1 (5.3%) respondent and 18 (94.7%) were married, for the control group of 19 respondents, it was found that as many as were unmarried 0 (0%) respondents and 19 (100%) married. Based on the results of the equality test, the p value was 0.269.

Based ondescription of the demographic characteristics of old HD seen fromrange and Mean ± Sd demographic value of duration of HD for the treatment group of 19 respondents found a range of 1 to 8 years with a Mean ± Sd of3.92 ± 2.19, for the control group of 19 respondents, the range was 1 to 8.4 years with a Mean ± Sd of4.08 ± 2.07. Based on the results of the equality test, the p value was 0.815.

Table 2. Results of compliance scores for limiting fluid intake in the treatment and control groups

Compliance Score	Group		Total (38)
	Treatment (n=19)	Control (n=19)	
Pre			
Range (Median)	16 - 60 (22.0)	16 - 60 (38.0)	16 - 60 (23.0)
Mean ± SD	28.37 ± 13.14	32.37 ± 12.73	30.37 ± 12.92
No	8 (41.2%)	6 (31.6%)	14 (36.8%)
Not enough	8 (41.2%)	10 (52.6%)	18 (47.4%)
Obedient	3 (15.8%)	3 (15.8%)	6 (15.8%)
Post			
Range (Median)	20 - 62 (50.0)	18 - 60 (40.0)	18 - 62 (47.0)
Mean ± SD	50.89 ± 10.42	41.89 ± 10.84	46.39 ± 11.44
No	1 (5.3%)	2 (10.5%)	3 (7.9%)
Not enough	1 (5.3%)	8 (42.1%)	9 (23.7%)
Obedient	17 (89.5%)	9 (47.4%)	26 (68.4%)
Delta			
Range (Median)	0 - 44 (24.0)	0 - 42 (4.0)	0 - 44 (12.5)
Mean ± SD	22.53 ± 15.04	9.53 ± 13.27	16.03 ± 15.46

Based on table description 2 that the pre-test compliance score for the treatment group of the 19 respondents who did not comply was as high as 8 (41.2%) respondents, less obedient as many as 8 (41.2%) respondents and obedient as many as 3 (15.8%) respondents, for the control group of 19 respondents who did not comply as much as6 (31.6%) respondents, 10 (52.6%) respondents were less obedient and 3 (15.8%) respondents were less obedient.

Based on the categorization of compliance scores after giving health coaching (post test) for the treatment group, there were 19 respondents who did not comply1 (5.3%) respondent, 1 (5.3%) respondent less obedient and 17 (89.5%) respondents obedient, for the control group of 19 respondents who did not comply as much as 2 (10.5%) respondents, 8 (42.1%) respondents were less obedient and 9 (47.4%) respondents were less obedient.

Based on these values, the compliance score in delta/change tends to be positive in both the treatment and control groups, where the positive value indicates that there has been an increase in compliance scores from pre to post.

Table 3. Results of Analysis of the Application of Health Coaching Based on Social Cognitive Theory on Compliance

Variable	Group	Pre-test	Post test	Delta	p-value
		Mean ± SD	Mean ± SD	Mean ± SD	
Obedience	Treatment	28.37 ± 13.14	50.89 ± 10.42	22.53 ± 15.04	0,000b
	Control	32.37 ± 12.73	41.89 ± 10.84	9.53 ± 13.27	0.002b
	p-value	0.347a	0.005a	0.011a	

[a] Mann Whitney, [b]Wilcoxon

Based on the results of table 3, the compliance test between pre and post in both the treatment and control groups, the p value was 0.000 and 0.002, where <0.05, which means there is a significant or meaningful difference in the compliance score between pre and post in both groups, which is based on the mean value. It was stated that there was an increase in compliance scores from pre to post in both groups. Based on the results of the control and implementation comparison test for both post and delta, the compliance scores obtained p values of 0.005 and 0.011, where <0.05, which means there is a significant difference in compliance scores between the treatment and control groups for both post and delta, which are based on the results and values. The mean of the treatment group is greater than the control group. This proves that the application of health coaching based on social cognitive theory is able to influence compliance for the better.

Table 4. IDWG results in the treatment and control groups

IDWG Ratio	Group		Total (38)
	Treatment (n=19)	Control (n=19)	
Pre			
Range (Median)	1.4 - 9.3 (4.2)	1.9 - 6.2 (4.0)	1.4 - 9.3 (4.15)
Mean ± SD	4.09 ± 1.55	3.97 ± 1.05	4.03 ± 1.31
Normal	0 (0.0%)	0 (0.0%)	0 (0.0%)
Light	7 (36.8%)	9 (47.4%)	16 (42.1%)
Currently	11 (57.9%)	9 (47.4%)	20 (52.6%)
Heavy	1 (5.3%)	1 (5.2%)	2 (5.3%)
Post			
Range (Median)	1.2 - 3.2 (2.3)	1.7 - 4.5 (3.0)	1.2 - 4.5 (2.9)
Mean ± SD	2.38 ± 0.58	3.22 ± 0.81	2.80 ± 0.81
Normal	0 (0.0%)	0 (0.0%)	0 (0.0%)
Light	19 (100%)	15 (78.9%)	34 (89.5%)
Currently	0 (0.0%)	4 (21.1%)	4 (10.5%)
Heavy	0 (0.0%)	0 (0.0%)	0 (0.0%)
Delta			
Range (Median)	-7.0 - 1.1 (-1.5)	-2.9 - 0.3 (-0.4)	-7.0 - 1.1 (-1.05)
Mean ± SD	-1.72 ± 1.64	-0.75 ± 0.86	-1.23 ± 1.38

Based on the categorization of the IDWG ratio before health coaching (pre test) for the treatment group, there were 19 normal respondents0 (0%) respondents, mild as many as 7 (36.8%) respondents, moderate as many as 11 (57.9%) respondents and severe as many as 1 (5.3%) respondents,for the control group of 19 normal respondents0 (0%) respondents, 9 (47.4%) respondents mild, 9 (47.4%) respondents moderate and 1 (5.3%) respondent severe.Categorization of the IDWG ratio after health coaching (post test) for the treatment group of 19 normal respondents0 (0%) respondents, mild 19 (100%) respondents, moderate 0 (0%) respondents and severe 0 (0%) respondents,for the control group of 19 normal respondents0 (0%) respondents, 15 (78.9%) respondents mild, 4 (21.1%) respondents moderate and 0 (0%) respondents severe.

Table 5. Results of Analysis of the Application of Health Coaching Based on Social Cognitive Theory at IDWG

Variable	Group	Pre-test	Post test	Delta	*p-value*
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	
IDWG	Treatment	4.09 ± 1.55	2.38 ± 0.58	-1.72 ± 1.64	0.000c
	Control	3.97 ± 1.05	3.22 ± 0.81	-0.75 ± 0.86	0.001d
	p-value	0.872a	0.001b	0.021a	

[a]*Mann Whitney,* [b]*T Test,* [c]*Wilcoxon,* [d]*Paired test,*

Based on the results in table 5, the IDWG analysis test between pre and post in both the treatment and control groups obtained a p value of 0.000 and 0.001 where <0.05 which means there is a significant or meaningful difference in the IDWG score between pre and post in both groups which is based on the mean value stated that there was an increase in compliance scores from pre to post in both groups. Based on the results of the control vs. treatment comparison test, both at post and delta, the compliance scores obtained p values of 0.001 and 0.021, where <0.05, which means there is a significant difference in IDWG scores between the treatment and control groups at both post and delta, which is based on the results and values. The mean of the treatment group is greater than the control group. This proves that the application of health coaching based on social cognitive theory is able to influence interdialytic weight gain (IDWG) for the better.

Table 6. Results of quality of life scores in the treatment and control groups

Quality of Life Score	Group		Total (38)
	Treatment (n=19)	Control (n=19)	
Pre			
Range (Median)	30.5 - 54.4 (36.4)	30.3 - 52.7 (36.0)	30.3 - 54.4 (36.4)
Mean ± SD	36.55 ± 6.31	36.03 ± 6.20	36.29 ± 6.18
Not enough	18 (94.7%)	18 (94.7%)	36 (94.7%)
Good	1 (5.3%)	1 (5.3%)	2 (5.3%)
Post			
Range (Median)	35.7 - 86.2 (62.1)	30.6 - 72.6 (37.2)	30.6 - 86.2 (47.45)
Mean ± SD	60.74 ± 16.09	42.34 ± 12.09	51.54 ± 16.85
Not enough	7 (36.8%)	15 (78.9%)	22 (57.9%)
Good	12 (63.2%)	4 (21.1%)	16 (42.1%)
Delta			
Range (Median)	1.2 - 55.7 (20.9)	-8.3 - 27.4 (3.6)	-8.3 - 55.7 (7.8)
Mean ± SD	24.19 ± 17.51	6.30 ± 10.60	15.25 ± 16.91

Based on table description 6 categorization of quality of life scores before health coaching (pre test) for the treatment group of 19 respondents whose quality of life was less18 (94.7%) respondents and good quality of life for 1 (5.3%) respondent, for the control group of 19 respondents whose quality of life was less18 (94.7%) respondents and good quality of life for 1 (5.3%) respondent P Categorization of quality of life scores after health coaching (post test) for the treatment group of 19 respondents whose quality of life was less7 (36.8%) respondents and good quality of life for 12 (63.2%) respondents,for the control group of 19

respondents whose quality of life was less15 (78.9%) respondents and good quality of life for 4 (21.1%) respondents.

Table 7. Results of Analysis of the Application of Health Coaching Based on Social Cognitive Theory on Quality of Life

Variable	Group	Pre-test Mean ± SD	Post test Mean ± SD	Delta Mean ± SD	*p-value*
Quality of Life	Treatment	36.55 ± 6.31	60.74 ± 16.09	24.19 ± 17.51	0,000b
	Control	36.03 ± 6.20	42.34 ± 12.09	6.30 ± 10.60	0.026b
	p-value	0.792a	0.001a	0.001a	

a Mann Whitney, bWilcoxon

Based on table 7 the quality of life analysis test between pre and post in both the treatment and control groups obtained a p value of 0.000 and 0.026 where <0.05 which means there is a significant or meaningful difference in the quality of life score between pre and post in both groups which is based on The mean value stated that there was an increase in quality of life scores from pre to post in both groups. Based on the results of comparison tests of control and implementation both at post and delta, the compliance scores obtained p values of 0.001 and 0.001, where <0.05, which means there is a significant difference in quality of life scores between the treatment and control groups at both post and delta, which is based on the results and The mean value of the treatment group is greater than the control group, this proves that the application of health coaching based on social cognitive theory can influence the quality of life for the better.

DISCUSSION

The influence of health coaching based on social cognitive theory on compliance with fluid intake restrictions

Based on the results of research conducted at the Hemodialysis Unit of the Surabaya Islamic Hospital on December 16 2023 - January 15 2024, before being given health coaching based on social cognitive theory, it was found that almost half (45.5%) of chronic kidney failure sufferers in both the treatment and control groups were less compliant. in limiting fluid intake. This is in line with research(Rahma, 2020)stated that the majority of compliance with fluid restrictions in chronic kidney failure patients was 34 respondents (59.6%).

This research shows that the application of health coaching based on Social Cognitive Theory (SCT) significantly increases the level of individual compliance with limiting fluid intake. These findings provide concrete evidence that the SCT approach in the health intervention process through health coaching is effective in stimulating behavioral changes related to fluid intake, with sustainable improvements in self-efficacy, observational learning, and self-motivation to comply with the rules for limiting fluid intake(Kelly et al., 2020). This illustrates the importance of social cognitive theory in the context of forming better health habits, with great potential for application in clinical practice and public health prevention programs.

The influence of health coaching based on social cognitive theory on interdialytic weight gain (IDWG)

Based on the results of this study, it shows that weight gain between dialysis (interdialytic weight gain) in hemodialysis patients at the Surabaya Islamic Hospital was mostly at a moderate level, namely 46 people (76.7%). This shows that the average patient experiences weight gain between dialysis of 2-5%.

Similar research was shown by (Bossola et al., 2022) that the majority of hemodialysis patients experience interdialytic weight gain at a moderate level. The same thing is also supported by studies (Hastuti & Mufarokhah, 2019) that the majority of hemodialysis patients are at a moderate level. According to (Murdaningsih et al., 2023) There are several related factors, one of which is demographic factors, including age, gender and education level. Age greatly influences a person's health status. Age will influence the patient's perspective in making decisions. Age is also closely related to disease prognosis and life expectancy, those over 55 years old have a tendency to develop complications that worsen kidney function compared to patients under 40 years old.

Based on age, it is known that the majority of hemodialysis patients at Surabaya Islamic Hospital are over 50 years old (63.3%). Study by (Dewi et al., 2022) revealed that there is a correlation between age and weight gain between dialysis (interdialytic weight gain) in hemodialysis patients, where older people undergoing hemodialysis have a higher potential to experience weight gain between dialysis (interdialytic weight gain) compared to younger people.

Based on gender, it is known that the majority of hemodialysis patients at Surabaya Islamic Hospital are male (55%). Study by (Zasra et al., 2018) revealed that the majority of hemodialysis patients who experienced weight gain between dialysis (interdialytic weight gain) of more than 2.5% were dominated by male patients. Consistently, this study found similar results where women had a lower potential for weight gain between dialysis (interdialytic weight gain) than men.

Based on the length of time undergoing hemodialysis, it is known that all hemodialysis patients at Surabaya Islamic Hospital have undergone hemodialysis for more than 1 year (100%). According to (Lilia & Supadmi, 2020) The length of time a patient undergoes hemodialysis has clinical implications for interdialytic weight gain, mainly through fluid adjustment or adaptation. This condition is also related to the fluid withdrawal process and salt restriction as well as the dialysate concentration gradient. Patients who have frequently undergone hemodialysis have the potential to experience severe post-dialysis volume depletion, this can lead to greater weight gain between dialysis (interdialytic weight gain).

In terms of proportion, this study shows that male predominance, older (advanced) age and the length of time undergoing hemodialysis which has been more than one year provide strong reasons for the increase in body weight between dialysis (interdialytic weight gain). Therefore, patients who consistently present with high weight gain between dialysis (interdialytic weight gain) practice salt restriction, and increase compliance with therapeutic recommendations and dialysis treatment times, can enable the achievement of a volume status that is close to normal so that the incidence of interdialytic weight gain can be reduced.

The influence of health coaching based on social cognitive theory on quality of life

Based on the test results using Mann Whitney, a p value of 0.001 was obtained, where the value was <0.05, which means there is an influence of providing health coaching based on social cognitive theory. This is in line with research conducted by(Rustandi et al., 2018)which states that health coaching for hemodialysis patients can improve social function, emotions, physical function, general health and quality of life scores.

Health coaching significantly improves the quality of life of chronic kidney failure patients undergoing hemodialysis. Factors such as self-efficacy, observational learning, reinforcement, and goal setting integrated in this approach have a positive impact on aspects of quality of life(Tannor et al., 2019).

Health coaching based on Social Cognitive Theory (SCT) has a significant positive impact on improving the quality of life of patients suffering from chronic kidney failure undergoing hemodialysis. The integration of SCT concepts in health coaching strategies provides a strong theoretical foundation for understanding and improving patient quality of life. The practical implications of this research support the development of interventions that can be adopted in clinical practice to improve the health management and quality of life of chronic kidney failure patients. However, keep in mind that these results may require further validation through follow-up research.

CONCLUSION

1. There are differences in compliance scoreslimiting fluid intake before and after providing health coaching based on social cognitive theory to chronic kidney failure patients undergoing hemodialysis and this difference is significant.
2. There are differences in scores*interdialytic weight gain*before and after providing health coaching based on social cognitive theory to chronic kidney failure patients undergoing hemodialysis and this difference is significant.
3. There are differences in scoresquality of life before and after providing health coaching based on social cognitive theory to chronic kidney failure patients undergoing hemodialysis and this difference is significant.
4. There isThe influence of health coaching based on social cognitive theory on compliance with fluid intake restrictions in chronic kidney failure patients undergoing hemodialysis.
5. There is an influence of health coaching based on social cognitive theory on interdialytic weight gain (IDWG) of chronic kidney failure patients undergoing hemodialysis.
6. There is an influence of health coaching based on social cognitive theory on the quality of life of chronic kidney failure patients undergoing hemodialysis.

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CONFLICTS OF INTEREST

In this research, from start to finish there was no conflict.

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